

FEBRUARY 21, 1942

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# Railway Age

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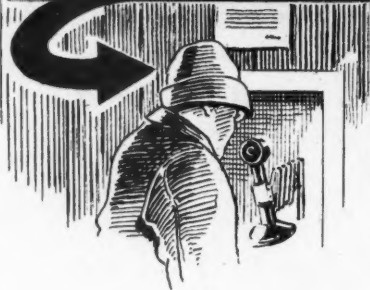
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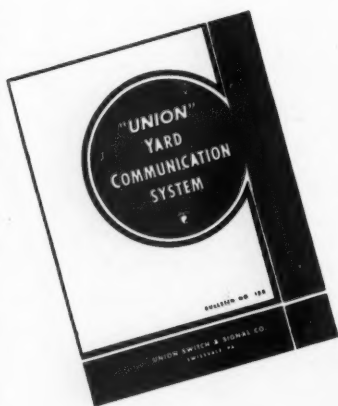


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# The Week at a Glance

## INDUSTRY TO THE RESCUE:

Donald Nelson made an eloquent and persuasive plea to the business press last week in behalf of arousing industry to the immediate necessity, first, of increasing its rate of production on existing war contracts and, second, "converting" machines now producing civilian goods to turning out munitions instead. One tank or plane built now is worth ten a year hence. Mr. Nelson's request is as sensible as it is urgent, and this paper hopes and believes industry will respond wholeheartedly—as our leading editorial herein makes clear.

## GOVT.'S DUTY TO RRs.: But industry,

and the army and navy, can't win this war by themselves. The government is the boss of all of them and, as our leading editorial proceeds to state and demonstrate, *government is falling down badly in doing its part to win the war.* Take the railroads for example. Everybody who knows anything about them knows that they are doing a job of surpassing excellence (read in our news pages what Petroleum Co-ordinator Ickes, certainly not a prejudiced witness, has to say on this score). But informed people also know that the railroads cannot keep on doing this kind of job if they do not get the materials to do it with—and assigning them the necessary materials is a government duty, which it is failing to perform.

## NON-DEFENSE EXPENDITURES:

Government is further demonstrating its frivolous and incompetent attitude toward the serious military situation by its continuance of huge political expenditures—such, for example, as the Administration's insistence on the passage of the billion-dollar pork-barrel waterway bill, including the St. Lawrence ditch and a half dozen other projects designed further to socialize transportation and power. The ease with which persons of little useful experience, but identified as Communistic fellow-travelers, get themselves into strategic jobs on the federal payroll, is not very impressive evidence either of a serious purpose by our government to deal realistically with our external enemies. The people are told that civilian goods and services are to be cut to the bone—and that is as it should be. But how about similarly reducing the civilian services of the government?

**POLITICS MUST TRIM TOO:** By willingly giving up new automobiles, by cutting down on sugar and by scores of similar sacrifices yet to come, the civilian population makes possible the transfer of labor, machinery and materials to the war effort. That is exactly as it should be. But why shouldn't the people also forego the services of the Rural Electrification outfit, some of the colossal army of Agriculture department employees and doles, and a few thousand government press agents and propagandists? Such curtailment would provide added materials and man-power to carry on the war—and cause less public inconvenience than the civilian

goods and services from private sources that have already gone by the boards. Industry must sweat and sacrifice to win the war. It has already done much—and it must do far more. But it certainly has the duty to demand parallel sacrifice and effort from politics.

## PULLMAN'S COMPETITION:

The principal competitor of the Pullman Company is the railroads with their improved day-coach service. Such was the opinion expressed this week by Pullman Vice-President Taylor in testifying in behalf of his company's application for a 10 per cent rate increase. Pullman's traffic has been increased by troop movement, witnesses explained, but the company just about breaks even on this business. The reason is that most troop movement carries the low tourist rate, and that cars assigned to such traffic work only about one day in four. Omitting military business, Pullman's traffic volume in January was actually a little below a year ago.

## ST. LAWRENCE STRATEGY:

As revealed in the news pages herein, the billion-dollar Pork Barrel Waterway Bill will probably come up in the House early in March, with President Roosevelt's blessing. The bill contains some really-needed dredging projects, despite the fact that it is largely political pork. The scheme is, of course, to make the House swallow the whole measure in order to get the jobs done which are actually justified. It is stipulated that none of the projects authorized may actually be begun until after the war, unless they are first recommended by a defense agency and approved by the President. How much of a safeguard that is may be judged from the fact that dancing has been classified as "defense" by some governmental authorities.

**BUS TRAFFIC BOOMS:** Class I bus lines in November reported an increase over the preceding year of 34 per cent in customers and 37 per cent in revenues.

## HOW TO KEEP OUT OF JAIL:

The Attorney General has provided, at Mr. Eastman's request, an outline setting forth how far the railroads may go in collaborating with each other in providing efficient transportation for the war effort, without being set upon by the Justice department's bailiffs and catchpolls as violators of the anti-trust laws. Mr. Biddle's outline is reviewed in the news pages herein. He seems rather unfamiliar with the Transportation Acts of 1920 and 1940 and is concerned lest the present emergency occasion transportation merger or co-ordination, especially between rail and highway agencies. In general, the Justice department's requirement is that transportation committees and associations work in cahoots only to assemble information. If it is necessary for them to establish a policy or order some action they should not do so of themselves, but let the ODT issue the orders.

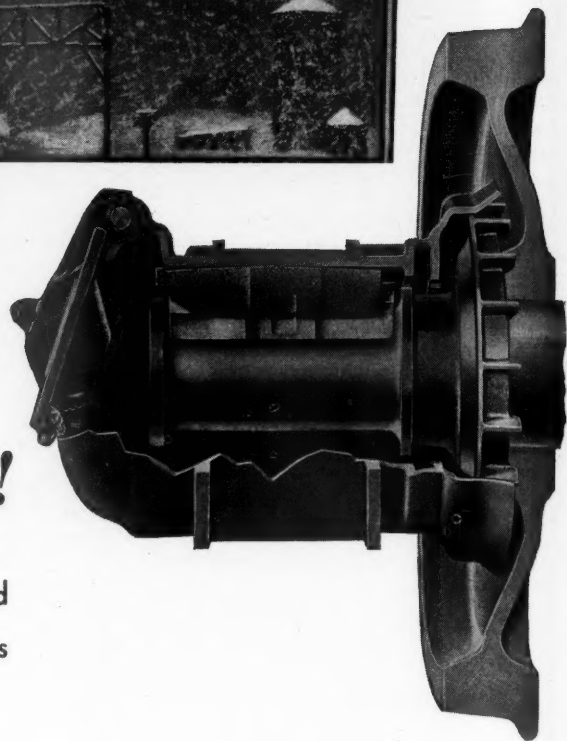
**HOW SHIPPERS HELP:** The railroads couldn't even begin to be doing the splendid job they are in transporting the present volume of traffic if it were not for the extraordinary co-operation of their customers. The extent to which shippers are exerting themselves—yes and spending money too—to load and unload cars faster, and load them heavier, is outlined in an editorial herein. In time of war people must work together or run the risk of military defeat. There are two ways of getting such co-operation—by the intelligent action of the people themselves or by governmental coercion. The former is the democratic way, and where else is it so well demonstrated as in transportation? Which is not to say that still more isn't possible.

## EDUCATION FOR RR WORK:

Most college boys who might make good railroad men are not well acquainted with the attractions of such employment. They think of a railroader as a roughneck in overalls with a lantern in one hand and a monkey-wrench in the other—all brawn and little brain. Such is the misconception which is depriving many young men of jobs they would like and the railroads of useful personnel—in the view of P. R. R. Superintendent J. H. Cooper, in a paper presented elsewhere in these pages. The fact is that, for the right kind of virile young man, few industries offer more attractions than the railroads—in intensely absorbing work, and the pay is pretty good too. A survey of the educational background of railroad officers indicates that, in the top positions, college-trained men predominate.

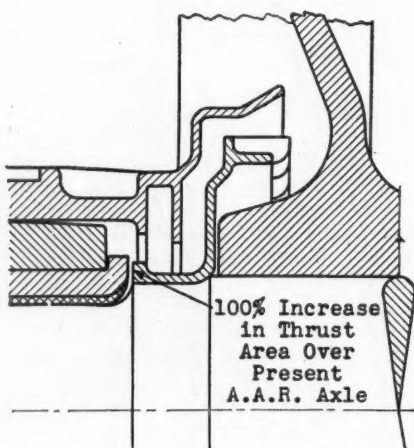
**ICKES IN GENEROUS MOOD:** The petroleum co-ordinator—who began his job last fall with a lot of non-factual fury against the railroads' claims of their ability to handle much larger quantities of petroleum—now admits, in chastened moderation, that the carriers have done an "amazing" job. Details of Honest Harold's apologia are given in the news pages herein. It has been observed of Ickes, on subjects he doesn't know anything about, that he is a screamer like Frenzied Fiorello—but that, when he really gets into a piece of work, he is a much more reasonable guy.

**RAIL LINE TO ALASKA?** Zealots for the construction of a highway to Alaska have revived their scheme now that war indicates the need for some communication with that territory not exposed to enemy submarine raids. President Roosevelt discussed the situation at his February 17 press conference and mentioned a single-track railroad as a possibly better solution. A railroad, he explained to the reporters, would be easier to keep open in the winter than a highway. He might also have told them that it would also handle far more freight at far less cost and with far less fuel, men and machinery.



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## RAILWAY AGE

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# Shall Government Help Industry Win the War?

The greatest war problem of the United States today is to get our governments into the war. Last week in Washington Donald M. Nelson, chairman of the War Production Board, in an address to the business press, adjured all industry to get into it. He said, in substance:

Victory, and the prevention of a ruinously long and bloody war, depends very largely on the degree to which American industry can squeeze immediately out of present productive facilities the very last ounce of munitions of war of which they are capable. The War Production Board has scores of experienced men from business and industry in its service, but these men cannot do effective planning for the 184,000 industrial plants of the country—telling the management of each how it can best serve the war effort now. To get all these plants (except those absolutely necessary for minimum civilian needs) into producing things which can injure the enemy this year, and even next month, most of the thinking and action will have to come from the managements of these plants themselves. It is on the free initiative of private enterprise that America must depend, if there is to be any hope of avoiding a protracted war.

### Industries That Are Really in the War

With the foregoing views of Mr. Nelson, this paper is in complete agreement. But the writer, while listening, kept thinking of the railroad industry. Here is an industry that has met all demands, while being handicapped by having government—i. e., President Roosevelt—force on it unwarranted wage advances, and by government persistently failing, month after month, to make good promises of materials for imperatively needed locomotives, cars and maintenance. The railroad industry ordered the equipment and materials. It put on the line the money to pay for them. But it has not got them, and is not getting them. Industry is not responsible for this. The railway equipment and supply manufacturing industry is not responsible; it has been prepared to produce all the railways have ordered. Government is responsible, because it has not made good on its promises of materials to the railways and manufacturers for them, and it is not making good yet.

The worst condition in this country is justified want of confidence in government by most intelligent people—government as represented by the President, his cabinet, members of Congress, governors, state legislatures, mayors, other local officials. For the most part private enterprise and industry are in the war, but terribly handicapped by the fact that for the most part our governments are not yet in the war, and are still up to their necks in politics.

### Why Lack of Confidence in Government?

It is a plain fact that thus far we have been losing the war. Pearl Harbor, Philippines, Normandie—a record of incompetence and disaster redeemed only by General MacArthur's magnificent ability and courage. Meantime, those in Washington really responsible whitewash themselves by passing the buck to subordinates.

The President and Congress pass the buck back and forth for their joint failure to reduce enormously-inflated federal political expenditures that they jointly increased. Congress, under Presidential pressure for the St. Lawrence "seaway" and similar political and socialistic projects, advances a billion-dollar waterway pork barrel bill toward passage. Congress makes itself ridiculous and odious by voting pensions for itself, while the people are being urged to sacrifice and save. Mrs. Roosevelt makes our war administration a laughing stock and undermines public morale by giving "defense" jobs to lady dancers, communist "fellow-traveler" movie actors and such. Many branches of the administration are stuffed with communists or "fellow-travelers" using the emergency to promote policies and propaganda for Nazifying or Sovietizing America—i. e., for establishing here what we are supposed to be trying to destroy abroad.

State and local governments, unrebuked by our "war leaders," join the federal government in maintaining or



increasing non-war government expenditures now totaling 450 per cent, or \$14 billion a year, more than during the last war.

### **Appropriations Won't Win the War**

The answer to every disaster is more billions of appropriations. Do the same people who tried futilely for years to lick the depression with appropriations now believe we can maintain our people at home and whip a large part of the world merely with government appropriations? If our governments are to spend virtually the entire national income, upon what do these people expect those not on government payrolls to live?

We are a divided people. We should not ignore or deny a condition so plain, but remedy it. We are so divided because so many despise and fear their government at Washington, believing its leadership either is incompetent or is trying to carry on one war against foes abroad and another war against private enterprise and the middle class at home. We were a united people during World War I. Why are we so disunited now? Well, nobody then charged, or even suspected, that the Wilson administration was promoting ulterior objectives at home. It didn't fill the government with communist and "fellow-traveler" officials and press agents to attack private enterprise that was willing, under competent government leadership, to devote all it had to the war effort.

### **Convert Government to War as Well as Industry**

Certainly all industry should get into the war. And nobody can say the railroad industry isn't fully enlisted and fighting with all it has. It has thus far made an almost perfect record of public service; and nobody in it is complaining about the kind of government supervision to which it has been subjected, either. Other private enterprise is doing its best, too—in spite of inefficient and spendthrift governments. But when are our state and local governments going fully to enlist by greatly reducing their enormously-inflated political expenditures? When is our federal government going fully to enlist by reducing its enormously and idiotically-inflated political expenditures? To add such gigantic war expenditures as are planned to such gigantic political federal, state and local government expenditures as are still being made would be economic hydrophobia.

And, finally—have we adopted the principle that "the king can do no wrong?" Or may one still ask why the President of the United States, while so eloquently pleading for unity, continues to cause so much disunity by continuing to give so many in so many ways the impression that he is still as much interested in highly divisive policies at home as in the war abroad? Why does he still promote the St. Lawrence project as a "defense" measure; defend the civilian conserva-

tion corps, the W. P. A., the 40-hour week; keep proved incompetents in his cabinet and other vitally important positions; do nothing but oppose those seeking reduction of hugely-inflated political expenditures that he principally increased; attack loyal business by (1) encouraging demands from organized labor while trying to control prices; and (2) permeating government departments with communists, fellow-travelers and their press agents who are committed to destruction of our form of government and enterprise?

### **Leadership's Responsibility Proportionate to Its Power**

He has such leadership and power in this great crisis because he sought them with all his unsurpassed self-confidence, ambition, perseverance and political skill. Therefore, he cannot evade proportionate responsibility. If there is disunity, it is his responsibility. If there is exorbitant government political spending, he principally inspired it, and it is principally his responsibility to reduce it. If there is inefficiency in the federal government, it is his responsibility. If there are disasters on land and sea—disasters even to ships tied up at docks—they are his responsibility; for he has directly or indirectly appointed every man now holding an important executive position in the federal government.

Yes, Mr. Nelson is right. All our industries should be converted as rapidly and completely as necessary to war work. But so should all our governments be similarly converted; not even a start has been made in converting them; and the time long since passed when all our politicians should have quit smearing industry and begun cleaning their own houses.

### **The Railroads' Record Versus Government's**

Most business men are doing their jobs in the war far better than almost any politicians, and industry as a whole far better than our governments as a whole, not excepting the federal government. What government, or branch or bureau of any government, can show as perfect a record of thus far fulfilling all its commitments to the defense and war effort as can the railroad industry? None that we have heard of. Has the federal government fulfilled its commitments to the railroads and manufacturers for them as well as the railroads and these manufacturers have fulfilled their commitments to the government? Some branches of the federal government—yes; but the federal government as a whole—not by a long shot.

If there is going to be smearing, let's all smear. If most of us are going to hold in abeyance our private and political ambitions for more income, more power and revolutionary changes, and devote our energies to carrying on a foreign war, let's all do it—including all leaders and members of labor unions, and all those in our governments, especially in the federal government.

## What Shippers Are Doing

More than 800 members attended a meeting of the New England Shippers Advisory Board in Boston a few days ago—the largest meeting of this kind ever held. This is merely one of the indications of the co-operative interest that American shippers are taking in national transportation in times of stress. Heavier loading, less detention time and better car handling in every respect are apparent everywhere as the shippers unhesitatingly accept their share of responsibility for keeping the nation's freight rolling.

This manifestation on the part of the shippers is remarkable, particularly when the not-too-distant past is considered. Only a few years ago, when cars were plentiful, nearly all shippers were guilty of slovenly car handling and a huge wastage of car hours and car days—or car weeks, for that matter. It must be admitted that, in many cases, they were encouraged in

this attitude by the railways, which, for competitive reasons and having plenty of cars, were prodigal in acceding to shippers' requests, even when such requests might well have been considered unreasonable. It was not at all uncommon for a shipper served by competing lines to have empty cars standing around for weeks awaiting his disposal. Both the shippers and the railways were at fault in permitting this situation to continue, although, with a great surplus of freight cars, no particular harm was done.

It is very much to the credit of the shippers that, as soon as necessity arose, they reversed their attitude completely. Once the seriousness of the car situation was realized, an entire changeover took place and shippers everywhere have pitched in with a will, often at considerable additional expense to themselves, to save car days, car hours, and, for that matter, car minutes.

Several agencies have had a part in this. First of all, it was brought about by the spirit of co-operation

## Inducing vs. Compelling L. c. l. Efficiency

The Merchandise Traffic Report of the Federal Co-ordinator of Transportation, released in 1934, was probably too revolutionary; undoubtedly some of its proposals were impracticable.

Nevertheless, that it was fundamentally sound in its criticism of the merchandise rate structure may be gathered from the endorsements that have since been given to its observations. For example, the Southern Freight Association has largely followed its recommendations as to rates. Many individual railroads throughout the country have taken like action. The Official Territory lines, as a whole, have approved a similar adjustment, but have not yet moved to make it effective. The A. A. R. Special Merchandise Committee made recommendations to the same effect. The motor carriers in New England have adopted a rate structure which conforms in principle. We quote from paragraph No. 43 of the Merchandise Report:

*"Necessity.—Present conditions of disservice in the field of merchandise transportation cannot be corrected without a radical revision of the system of charges, out of which such conditions have arisen. The revision should have three clearly defined objectives: First, to make tariffs simple and intelligible to anyone however unfamiliar he may be with the subject; second, to eliminate all provisions which unnecessarily add to the shipper's cost in preparing his goods for transportation; and third, to provide a system of charges which, while returning to the carrier its full cost and fair profit, will make it unprofitable for anyone to traffic in carrier rates and for one carrier agency to engage in transportation which can be more economically performed by another."*

Statements to this effect within the past year or so by such eminent and practical men as Walter S. Franklin, traffic vice-president of the P. R. R., indicate that the Merchandise Report's views on rates still retain their validity. The great difficulty in the way of making this fundamental revision applicable throughout the country seems to be the failure of the individual carriers comprising each

form of transportation to realize that they are all playing on the same team, namely, the team for their branch of the industry.

It appears certain that steps must be taken, in behalf of efficient transportation for the war effort, to remove some of the waste in the handling of traffic, both by rail and truck. The question arises: Will the steps taken be the "shot gun" type, or will they follow sound economic principles? If "shot gun" methods are the only ones available, then no complaint can be made against them—because after all, the most important job of all is to win this war. But is it not probable that action made imperative by the emergency can be *both* effective and economically sound? The possibility ought at least to be explored.

Necessity for some action is indicated by the fact that more than 20 per cent of the total freight-carrying equipment of the railroads is tied up in the handling of merchandise traffic. There is a similar waste in competing truck-miles. Lightly-loaded merchandise cars are moving over the same rails and in the same trains with forwarder cars, and to the same destinations. Innumerable truck lines are paralleling this duplication day after day. Neither rail nor truck can do the efficient job that needs to be done with this traffic, as long as unjustifiable duplications persist. Wasted car-miles and truck-miles are going to be needed for other traffic.

It is all well enough to appeal to each branch of the industry and the shippers to co-operate in the common cause, but why should such action be called for against the profit incentive, when it is possible by means of a realistic rate structure to make profit and the national interest coincide?

There may be other possibilities of securing greater utilization of transportation equipment, but is not the first logical step that of *inducing* traffic to flow in its economic channels? The old man might restrain himself from reaching for the shot gun, until he has exhausted the resources of reason.



existing among the shippers themselves. The regional advisory boards were of material assistance; the National Industrial Traffic League directed its energies to this end; the *Railway Age*, through its Freight Progress issues, distributed to thousands of shippers, aided in publicizing the need for alert car handling and cited such examples as a large company which eliminated demurrage entirely at five large plants and thereby served to spur on the effort. The executives of the shippers have also been particularly helpful. Similarly, the railways found numerous examples of local conditions that were delaying cars, where the local industrial traffic manager did not have the authority to rectify the situation. Hundreds of such cases were brought to the attention of the shippers' executives by the heads of railway traffic departments and the conditions were soon corrected.

Meanwhile, the personnel of the service bureau of the Interstate Commerce Commission has been enlarged materially. While the I. C. C. has unquestioned punitive authority in cases of this sort, it has wisely not seen fit to exercise it, except in one or two extreme cases. Rather, the effort has been to secure shipper co-operation through suggestion and advice instead of drastic action. Commissioner J. M. Johnson has been particularly active and helpful in this respect.

On several occasions recently he has called together representatives of entire industries to discuss increased efficiency in handling freight car equipment as it applied to the industry in question. The latest meeting of this sort, presided over by Colonel Johnson, was with representatives of the bituminous coal industry. Topics such as terminal detention, free time at ports, reduction in classifications, excessive detention of individual cars, and many others were thoroughly discussed, and proper loading and handling methods were suggested. Meetings of this sort have been productive of much good.

The authorities in charge of the allocation of critical materials must eventually realize the importance of giving the railways materials to enlarge their supply of equipment to handle the increased traffic as well as to maintain their existing facilities. It is highly unlikely that there will be anything resembling a car surplus during this emergency. Every talent railway operating officers possess will have to be used to the utmost if the nation's freight is to be moved. Even then, the task can not be accomplished without shipper co-operation. It is heartening to observe that this co-operation is forthcoming. It should be fostered in every possible way, for its importance to the efficient transportation of a nation at war can hardly be overestimated.

## Industry Asked to Don Khaki

It means just about everything to America that industry should exert itself to the utmost *now* to turn out the maximum production of war goods of which it is capable. Such was the message of Donald Nelson, head of the War Production Board, to the editors of the business press—whom he invited to Washington last week to explain to them what the country's war needs are; and to enlist their aid to carry this picture of the nation's necessity to their readers in industry and business.

How can industry vastly expand its output now? In Mr. Nelson's view (well-supported by evidence of what many plants have already done), facilities already on war work can have their working hours pushed up as near to 168 per week as humanly possible. But that won't be enough—there has got to be a big and instant change-over of as much plant as possible from civil to military goods.

Don't wait for the government to come to you (if you are a part of industrial management), Mr. Nelson urges. Instead, try to figure out some way that present machinery can improvise some one of the thousands of products (or parts thereof) which are urgently needed now, to strengthen and protect the soldiers and sailors who stand between the enemy and America.

The War Production Board has district offices all over the country, and in its Washington office there are representatives who are expert in the conditions of each important industry. Manufacturers are urged to get into contact with either the Washington office or one of the district offices to find out what products are needed; and thereafter to exercise their ingenuity to try to produce some of them.

The present situation is a challenge to free enterprise, Mr. Nelson pointed out. "Planners" situated in Washington can never figure out what it is that each plant can best do. The fact that we have private industry gives this country thousands and thousands of planners, and, if all their skill and resourcefulness are enlisted, America can do a far better production job than any totalitarian country could do. For that matter, though, we have got

to do a much better job than the totalitarians—because we have got to work up to a *rate* of production in a couple of years that they spent ten years upon; and, more than that, we have got to work against the *reserves* of munitions which they laid away before they embarked upon active piracy.

There are three ways to speed up the production of American industry *now*. One is to work present plants longer hours. Another is for prime contractors to do more sub-contracting than they are now doing. The third is for producers of civilian goods to shift to war work.

One tank or gun or plane produced this month or next will be worth ten produced a year hence. Unless we can stop the Axis from spreading too widely this year, they will become so firmly entrenched in so many places that it will take billions of treasure and thousands of lives of American young men to dislodge them. Those boys who will needlessly die if we fail now to produce may be our own sons, or brothers, or nephews, or employees or fellow-workers. Industry has every incentive there is to do what is asked of it; none at all to do otherwise.

By innumerable examples, Mr. Nelson and his colleagues demonstrated that hundreds and hundreds of industries are doing precisely what he is urging on the whole industrial and business community. What is needed is that all industry do likewise.

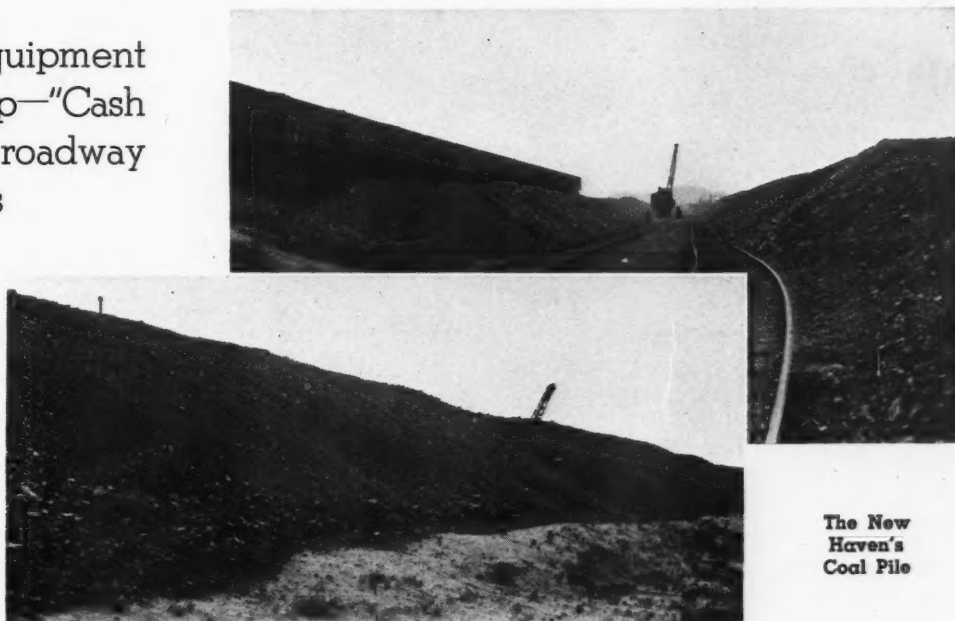
Several of Mr. Nelson's associates related to the assembled business writers various details of the WPB program—that dealing with the training of foremen and employees appearing to be particularly suggestive.

While all this has little direct bearing on transportation, it is not unrelated thereto; because the railroads will be looked to to carry any part of the weight of this program that they can. And, of course, that is exactly what they will do too. We are passing along the above brief report just so our readers will know what is going on—because what affects the customers of the railroads also affects the railroads and what affects the welfare of our country affects us all.



# New Haven Storekeeping Ready for Emergencies

Use speedy equipment in handling scrap—"Cash and carry" for roadway supplies



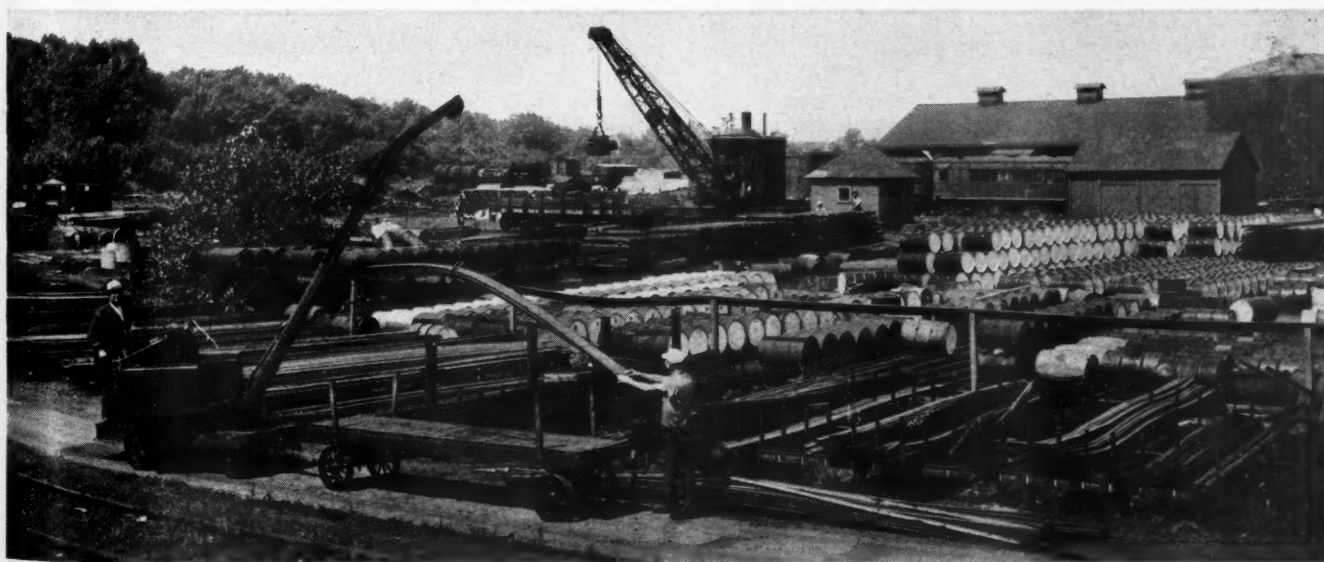
The New Haven's Coal Pile

**I**N keeping the railroad supplied with material, storekeepers of the New Haven use facilities and a routine which have survived numerous investigations and proved equal to many emergencies and their routine was only recently rechecked to assure its workability during the present national emergency.

Each division of the road continues to do its own pricing of the materials used. This work is performed by the storekeepers who price every requisition made on the stores for materials, calculate the totals and make the distribution of charges to operating expense accounts subject to check by local representatives of the accounting department, one auditor being stationed at the general storehouse with accounting supervision over all

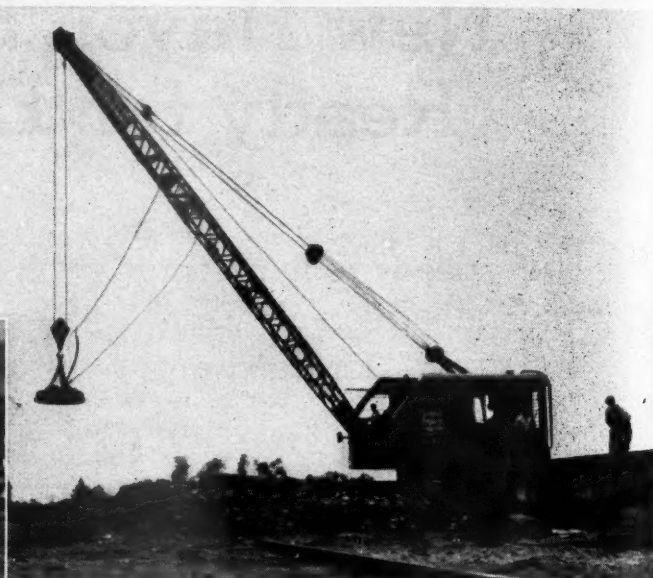
points. The latest price is used and, by using a reference number on all materials, the work is said to be performed speedily and inexpensively. Each item number is three numbers in one—the material classification number, the page of the stock record where the material is listed and the numerical position of the description on the page, for example, figure 11-3-15.

Stock books are used for maintenance of equipment materials and stock cards for maintenance of way materials. As material is issued, the material tickets are marked with the correct item number, as shown in the stock book or attached to the material racks. The price clerk arranges these tickets numerically and applies the unit prices given in a price book, which is a simplified



Stores of Paint and Steel at Readville, Mass.

"American" Crane with 50-ft. Reach and 20 m.p.h. Speed, Handling Scrap on New Haven



operation for the reason that the pages in the price book are duplicates of those in the stock book in-so-far as the description of materials and the arrangement of the items are concerned. The prices are then extended by comptometers, following which the distribution work is performed by sorting the slips by operating accounts and posting only the total value of all the slips held for each account. With this method, the pricing proceeds in one direction without lost motion in searching price records; neither is there any excuse for applying the wrong prices to the material. When sharp changes occur in prices, it is the practice to find out how much material is still on hand and a notation is made in the price record so that previous prices will be used until this quantity of material has been accounted for. The stores department is unable to see how an investment in automatic machines would improve on a method which requires only one price clerk at New Haven, for example, where the issues exceed \$500,000 a month. Moreover the annual inventory, which is taken by accounting forces, never shows discrepancies in excess of one per cent in the year's transactions.

### 23 Stores—280 Men

The New Haven has its largest stores at New Haven, Conn., Readville, Mass. (on the outskirts of Boston), and at Van Nest, N. Y. New Haven was a distributing store for the entire railroad, but is now the system's store only for stationery, signal, telegraph and telephone materials, and for electrical materials for bridges and buildings and maintenance of way. It also carries all materials for local consumption and includes the office of

the general storekeeper, while all materials for locomotives, freight and passenger cars and train supplies are kept at Readville. Materials for electric traction are kept at Van Nest, New York, where the railroad's shop for electric locomotives is maintained, while all high tension line material is kept at New Rochelle and Bridgeport, Conn. Roadway materials and scrap sorting are centralized at Montowese, within sight of the company's freight classification yard at Cedar Hill, near New Haven. The railroad also has a system tie yard in the same vicinity. Storekeepers are located at 24 points, including Danbury, Stamford, Waterbury, and Hartford, Conn., Maybrook, N. Y., Springfield, Worcester, and Boston, Mass., New York City, and Providence, R. I. This takes in all the stock of materials and supplies, except that each division maintains a stock of emergency materials for special trackwork, bridges and buildings.

Readville carries a \$1,200,000 stock balance, against \$400,000 of issues per month, while the combined stock at New Haven, New Rochelle, Bridgeport and the roadway stock on the New Haven Division amounts to \$1,200,000, against issues of \$500,000 per month; Van Nest carries about \$240,000 of stock, against a net consumption of \$60,000 a month. The consumption at Van Nest, however, does not include motors and transformers for electric locomotives, which are carried in a special account and, if based upon their rotation thirty-three times a year, would reflect an additional turnover of \$147,000 per month. The store department force includes 280 employees, of which only 15 employees are engaged in handling operations.

An actual count of each class of material is taken at



Bridge Tie Yard and Saw Mill  
Near New Haven



all distributing stores at the same time each month, while the annual inventory is taken by counting the stock at one location after the other during the period from June 30 to October 31 each year. Classified statements of materials on hand, purchased and issued, are kept by operating divisions and consolidations of the quantities in stock are maintained for the entire system. However, all requisitions made by storekeepers or other custodians of materials still require information as to the units on hand, on order and used and this information is relied upon not only to study the stock at different locations but to afford a check on the completeness with which issues from stock have been reported for distribution. In the case of roadway stock, this information is posted on cards and if the issues appear to have been reported incompletely, adjustment requisitions are obtained to reconcile any deficiency, thus keeping the stock in balance.

### No More Supply Cars

Supply cars were once definitely popular for distributing materials to the line of road on the New Haven but were abandoned ten years ago and the materials are now distributed by local freight trains and by highway trucks. Station supplies are distributed at regular intervals in l. c. l. cars. Bridge and building, and track and signal forces are equipped with 250 automobiles and highway trucks which handle maintenance forces and materials over the highways. This equipment is used to distribute practically all their materials except materials for program work which is shipped by rail. The railroad purchases all its water for locomotives and stations and thus has no supply problem with pumping plants. All the gasoline requirements are obtained from its own tanks which are supplied by nearby public service stations with which the railroad has contracts for either tank car or tank truck delivery at wholesale rates. The delivery of materials to the line of road has been further simplified by the elimination of section houses, and the performance of all roadway work by extra gangs.

All materials picked up by highway trucks are issued on requisitions which have been issued to the storekeepers in advance of the pickup and delivery service. The storehouses are also equipped with highway trucks which are used in delivering some materials from distributing stores to local stores and roundhouses. The material-handling equipment at the larger stores includes electric crane trucks, with the aid of which much material which moves by rail to storehouses is handled in skidloads. For the past three years, on the other hand, all wheels mounted on axles have been shipped on specially-assigned flat cars, fitted with sheets of steel into which rectangular holes are cut and so spaced as to hold snugly 17 pairs of wheels without aid of blocks. The railroad has 25 of these cars and has found them exceptionally satisfactory for shipping mounted wheels to outside car points and returning scrap wheels to the wheel shop at Readville.

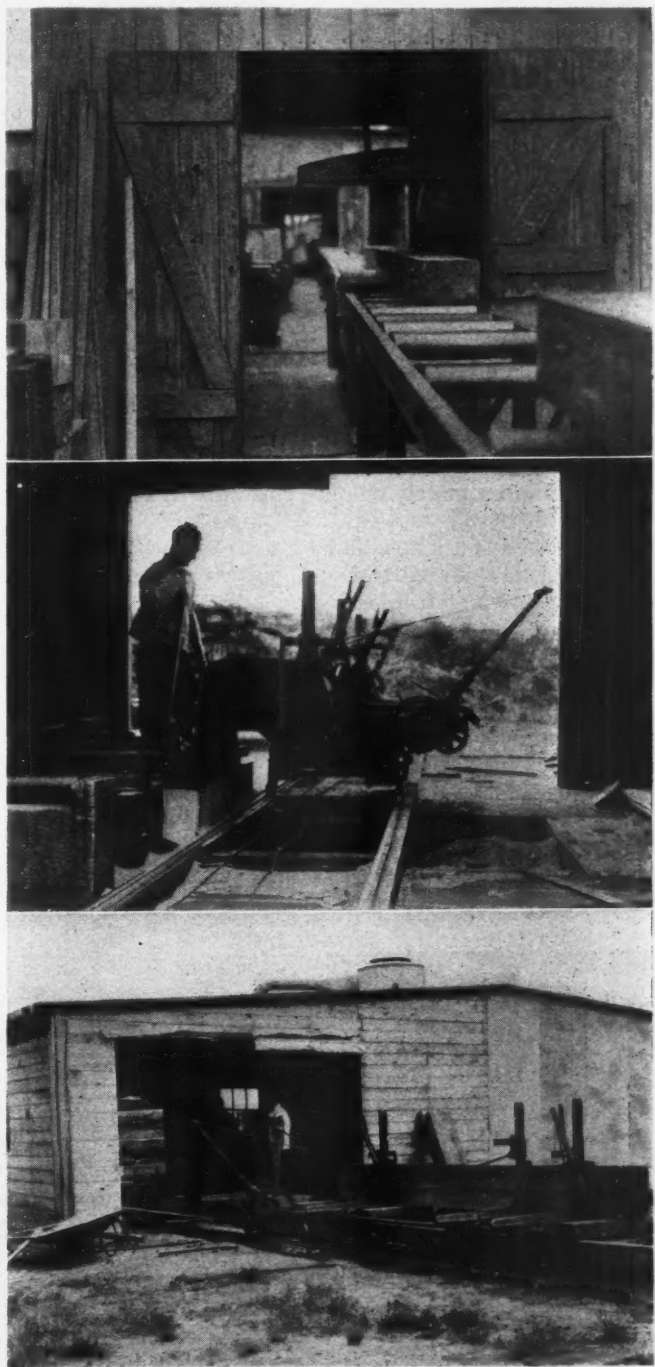
### Short Cut Purchase Methods

The combined requisition-purchase order form is used in placing requisitions on the purchasing department and, with materials purchased under term contracts, such as wheels, grey iron malleable and steel castings, journal brass and bearings, pipe fittings and boiler compound, and paint for bridges and buildings, the stores insert the name of the supplier and one tracing clerk is constantly engaged in the office of the general storekeeper watching unfilled orders and deals directly with the

dealers in expediting deliveries. In policing the delivery of materials for program work on cars and locomotives as well as in preparing the original orders for these materials, special attention is given to reports which are prepared daily by the superintendent of shops, enumerating the equipment in the shop and indicating when each car and locomotive is due out of the shop.

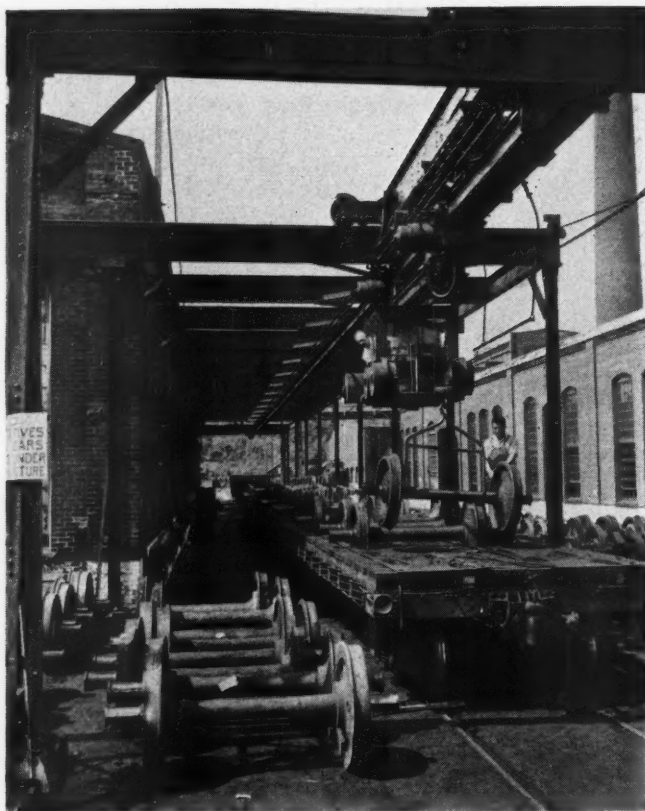
### 40 Acres for Ties

All cross, switch and bridge ties and all other forest products subject to treatment are handled in the New Haven's tie and timber yard at Montowese which is located within ten miles of New Haven, while all bridge and building lumber is carried in the maintenance of way yard at Montowese and all car lumber is stored at Readville. This is with the exception of small quantities



Saw Mill for Preframing Bridge Ties and Reclaiming Timber—  
All Machines Electrically Driven





Loading Mounted Wheels on Special Wheel Cars at Readville,  
17 Pairs per Car

of timber required at certain storehouses and also emergency stocks at certain bridges. The present tie stock consists of approximately one half million cross ties, of which approximately one half are now treated. About 98 per cent of the cross ties are mixed oak and 2 per cent are birch and maple and they are all produced local to the line of the railroad. About 90 per cent of the switch ties are also from oak stands local to the railroad, while 5 per cent are black gum and 5 per cent are southern pine. The present stock of treated ties includes two hundred thousand more ties than it is customary to have in the yard at this time—the result of a large program of line abandonment, the ties from which were inserted in live tracks in place of new stock. The tie yard embraces about forty acres of land, laid with four standard gage tracks, each one-half mile long, and one shorter track, which are all used for handling ties while other tracks serve the tie and timber preservation plant of the American Creosoting Co. The ties are usually

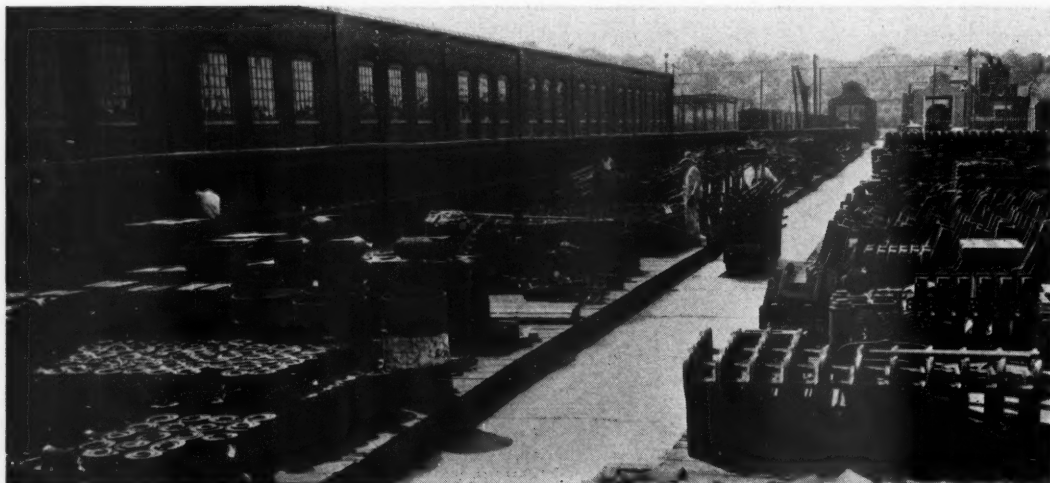
received in rough-loading box cars because of the tightness of the gondola car supply and are unloaded by contract labor, while both the yard and the tie plant are served by a Brown-Hoist steam locomotive crane equipped with a 30 ft. boom. Anti-checking irons are applied to both ends of all ties when they are stacked for resawing and the date of stacking is stenciled on each pile for identification. All track ties are sized for tie plates and bored for spikes before treatment.

### Saw Reject Lumber

A feature of this yard is the plant at one end which is operated by the railroad for preframing bridge ties and for resawing reject and second-hand lumber into grade stakes, wedges and other by-products. This plant was originally powered with gasoline engines but is now electrically-operated. In one shed is a saw mill consisting of a carriage for feeding timbers up to 12-in. by 18-in. by 30-ft. into a 40-in. circular saw which is used for resawing timbers into smaller cross sections. A 30-in. circular cut-off saw is installed in another shed while a third shed has four dapping machines and a tool grinder. Each machine has a start and stop switch, an over-load switch and a safety switch, and the main building has two push-button stations for use in emergencies. The plant is also equipped with a blower system for collecting sawdust and all timber is moved from saw to saw on roller conveyors. On either side of the plant are skids for storing timber and bringing it to the conveyors. A narrow gage track is laid between this plant and the timber preserving plant for the movement of preframed material to the retorts. All ties selected for preframing are laid out on the skids and marked according to blueprints, when they are first sawed to exact length and then pushed through the dapping machines preparatory to treatment. The plant employs ten men and a foreman and produces annually about 12,000 to 14,000 bridge ties, besides many other by-products.

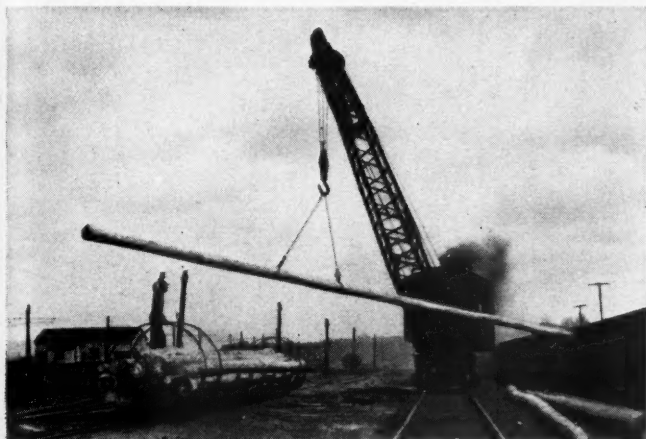
### Economical Scrap Handling

At Montwese, the railroad not only maintains a system storehouse and yard for all roadway and bridge and building materials, valued at the present time at approximately \$300,000, but operates a scrap yard where all roadway scrap and some miscellaneous car and locomotive scrap are shipped for sorting and preparation for sale or salvage. This yard is also a storage point for old bridges, turn tables, signal towers, machinery and other materials which are removed from service and



Car Parts at the  
Readville Store

held for possible use. At the Readville car and locomotive shops, the railroad operates a scrap yard for car and locomotive scrap. The railroad shipped 60,802 tons of iron and steel scrap in 1940, consisting of 23,500



In the Tie and Timber Yard  
Top—Loading Poles for Treatment, Center—Treated Ties,  
Bottom—Untreated Ties

tons from Readville, 4,112 of cast iron wheels, and 33,200 tons of iron and steel scrap from Montowese.

No permanent buildings or platforms have been constructed in this yard but the area is well served by tracks which are connected to each other at both ends and served by locomotive cranes. Since last October, this yard has been equipped with an American Hoist and Derrick gasoline-powered locomotive crane which has a 50-ft. boom and a 54-in. magnet and can travel at speeds as high as 20 miles per hour. With the aid of this crane, which serves all parts of the Montowese plant, an average force of only 12 men are handling

100 tons of scrap a day at a reported cost of only 75 cents per ton for direct labor, including a part of the crane service. The total force at Montowese consists of 30 men, including the force handling roadway stores. Another modern aspect of the Montowese yard is the use made of a Diesel-electric locomotive for switching all cars in and out of the yard, this switcher operating between the Montowese yard, the tie plant and the freight classification yard.

### 2,000 Cars of Coal in Storage

Unlike most railroads, the New Haven, being 500 miles from coal mines, stores coal. For this purpose it has a trestle near the freight classification yard at Cedar Hill, consisting of steel girders on pile bents where coal is brought in hopper cars and dumped and then piled on either side of the trestle by steam cranes. It also stores coal at its western connection at Maybrook and at its Cos Cob, Conn., electric power plant, in the heart of its electric division. By anticipating the coal miners' strikes in 1939 and 1941, sufficient coal was placed in storage to relieve the road from the anxiety prevalent in that section of the country and, at present, the railroad is unloading approximately 20 cars of coal a day and now has over 2,000 carloads in storage, sufficient fuel to last two months.

## Seaway Power Link Hit As Crippling War Effort

**A** PROJECT of the federal government to build a \$30,000,000 320-mi. electric power transmission from New York to Massena, N. Y., to supply an aluminum plant now building at the latter point with surplus power from New York steam plants, has been denounced by various parties in the state as unnecessary, and wasteful of men, materials and money when they are needed for an all-out war effort. The chief objection raised by them all is that the line is actually an opening wedge for an integrated public power network from the St. Lawrence to T. V. A. lines. Massena is on the St. Lawrence, and the New York Power Authority—a creation of F. D. Roosevelt when he was state governor, and chief backer of the scheme—has admitted that eventually the direction of transmission would be reversed and "cheap" St. Lawrence power brought into New York city in competition with private utilities.

Worried about possible defacement of his parks and parkways, Robert Moses, park commissioner of New York and surrounding counties, recently denounced the project, declaring that it is wasteful to build a new line to carry steam-produced power 320 miles when there is plenty of room next to the power stations in New York to build such aluminum plants and that, in any event, existing lines should be utilized. He said: "I can't for the life of me understand what this destructive, uneconomical and unnecessary 320-mi. power line has to do with the war. Aluminum can be made much more quickly and economically next to one of the waterfront plants in Brooklyn, where there is plenty of surplus power at the present time, and where we have the labor, the dockage for boats bringing in the bauxite and all the other necessary facilities.

"It is probably true that matters have gone so far at Massena that the 70-mi. line to bring Niagara power to this location is needed, but what has this to do with

(Continued on page 419)





College Men Entering Railroading Have a Better Than Average Chance of Success, Provided They Can Qualify and Are So Constituted as to Meet the Exacting Requirements of the Work

## College Men Have Large Place In Modern Railroading

Railroad officer says college-trained men and the railroads should get together to their mutual advantage. Professor says colleges are co-operating

**P**RESENTED herewith are abstracts of two addresses made before the Transportation section of the Society for the Promotion of Engineering Education, at its last annual meeting at Ann Arbor, Mich. The first, by J. H. Cooper, superintendent of the Pennsylvania at Fort Wayne, Ind., points out that there is real opportunity for the right kind of college-trained men on the railroads today, and cites the record of the large number of such men who have achieved executive and supervisory positions in this industry. The second address, by John S. Worley, professor of transportation engineering, University of Michigan, tells primarily of the curriculum set up by the Transportation Division of

Civil Engineering at the University of Michigan, which is geared specifically to present-day transportation problems.—Editor.

### The Door Is Open For Qualified Graduates

By J. H. Cooper\*

In choosing his life's work, the average technical graduate does not, as a rule, think of railroading. When he does select it as an occupation, it is usually because some one sells the idea to him with some persuasion. This is probably because, in considering railroading, if he thinks of it at all, he does not relate it to any art or science, or to his college education. His picture of a railroader is probably that of a rough looking individual in overalls, with a lantern in one hand and a monkey wrench in the other. His imagination conceives an occupation that may demand some brawn, not much brain, and certainly little education.

In his discussion of a railroad career with others, if such an occasion has been afforded him, it may be that railroad work has been disparaged because of its severity,

\* Superintendent, Pennsylvania, Fort Wayne, Ind.



small pay and limited opportunity. With such a viewpoint, it is not difficult to understand why more college men do not decide early to follow the railroad profession; do not point toward it and equip themselves while in college to be prepared basically to start railroad work with a fundamental education that will give them a lead over the conventionally educated engineer or the practical man engaged in the same work.

The lazy individual should not think of entering railroad work. However, for the man who likes to work, with stamina and an active brain, there is no industrial employment that has more attractive features. It is more than tracks and trains and stations and men in overalls. These are only the visible aspects of the brains and resourceful science that make possible the organization that transports the nation's business.

### Railroads Offer Large Opportunity

It has been said that there is insufficient opportunity for advancement on the railroads to warrant the ambitious college man selecting it as an occupation. This statement is broad enough to challenge, and its conclusions are of sufficient importance to warrant review. It should be carefully examined from the viewpoint of both the railroads, who require the best brains available to accomplish successfully management, and of college men who, in all fairness, are entitled to the most advantageous work that their qualifications can command. It is a well known fact that, as the result of competition, regulation, the demands of labor, legislation and the present necessity to handle a large volume of business, there has never been greater incentive for railroad men to exercise vision, ingenuity, technical skill and common sense, than there is today.

During the early years of railroad construction, many civil engineers found employment on the railroads and achieved notable successes in solving their new problems. The problems of these days are multiplied many times today, and their solution is an ever-present opportunity for those men who have the ability, plus the desire to take them on.

The man who can and will qualify with success has a better than average chance on the railroad, provided he is so constituted as to meet the requirements of the work. They are exacting. He cannot be a weakling. He must, first of all, be physically strong and mentally well-balanced. He must be able to go at top speed for long periods of time, and in an emergency lose sleep and rest without injury to himself. He must be mentally alert, and not only receptive to new ideas, but ingenious enough to initiate fresh thought and practices. He cannot be a quitter. His mental reactions must be such as to meet adverse conditions, constructive criticism and disappointment without discouragement. He must have a mental resiliency that will not admit defeat, but that will rebound a little stronger after the experience of each failure. He must have the qualities of leadership. He must have a personality that enables him to get along with the men who work for him and with those for whom he works. He need not be an honor student if he is well rounded as to all college activities.

### Many College Men on Railroads

It may be said that the qualifications I have named are unreasonable and are not attainable attributes in the average college man. On the contrary, I believe that they are to a very large extent. To illustrate, I will cite some figures that indicate clearly that the requirements I have mentioned have been present in college men on

enough railroads to show precisely that such men are not a rarity. I quote from an address by C. E. Smith, vice-president of the New York, New Haven & Hartford—

"Chief executives of 180,458 miles of railway, comprising the larger and more important systems in the United States, were divided as to training, as follows: 36 per cent of the mileage was headed by civil engineers; 40 per cent of the mileage was directed by college graduates in other than civil engineering; and 24 per cent of the mileage was administered by graduates of the 'school of hard knocks.' This analysis, covering 31 large railways and railway systems, shows that 23 of the 31 chief executives are college graduates, while 8 are non-college graduates."

Mr. Smith also furnished data concerning the heads of departments on these same railways, which indicates that college graduates (both technical and non-technical) head the several departments as follows, on a percentage basis of the total mileage: Accounting, 24 per cent; purchases and stores, 26 per cent; operating, 28 per cent; traffic, 31 per cent; mechanical, 47 per cent; miscellaneous departments, 47 per cent; engineering and maintenance, 84 per cent; and law, 100 per cent. On the 84 per cent of the mileage whose engineering departments were headed by college graduates, these officers were, naturally, all civil engineers, but, in addition, civil engineers headed the operating departments on 20 per cent of the mileage, and miscellaneous departments on 29 per cent of the mileage.

Mr. Smith also made the further comment: "The amazing feature of the showing of civil engineers in railroading is that much less than 35 per cent of the personnel on the railroads are civil engineers. While I have no statistics to support such an estimate, I would say that 5 per cent would be a very generous estimate of the proportion of civil engineers in railroading, which indicates that their chances of getting to the top have been seven times the chances of all others."

### Cites Erie, Southern and Pennsylvania

I am unable to break down these figures as to individual roads at this time, but it is of interest to point to the situation on a few specific roads. On the Erie, for example, half the higher officers are college educated.

The Southern, as far back as 1914, took on a number of young college graduates in engineering with the view of giving them sufficient practical experience to justify their use ultimately as officers in the maintenance of way department. These men were first restricted to those having an engineering education, but this road now has men in service who are graduates in business administration. Quoting in regard to this road:

"At first we had in mind the building of a reservoir of men for advancement in the maintenance of way department, but as soon as it became evident that the quality and characteristics of the men taken on were exceptionally good, the plan was broadened to include the use of men out of this same group for advancement in the transportation department. Most of the men who have been promoted to the position of trainmaster during the last few years have come from our student apprentice class. When they have become supervisors, their future advancement is up to them and they advance or not depending upon their aptitude and ability. Out of this class we make roadmasters (or division engineers). The transportation department takes men out of our supervisor class and makes trainmasters of them, and, if they do well, makes them superintendents.

"As an indication of how the apprentice system has

worked on our lines, the officers on our system who have come out of that group include a vice-president in charge of operations, a general manager, an engineer maintenance of way, an engineer of bridges, 10 division superintendents, 7 trainmasters, 8 roadmasters and 30 supervisors."

The Pennsylvania, for at least 50 years, has followed the practice of employing college men for training as officers. At the present time, college men fill the positions of president, operating vice-president, four of four regional vice-presidents, three of four general managers, eight of nine general superintendents, and 19 of 27 superintendents. Also, the preponderant majority of the supervisors in the maintenance of way and engineering departments are college men, while the traffic and other departments are also employing such men. These men, I believe, have succeeded, and I may say that it is a matter of record that this railroad has been operated successfully.

It is pertinent to the question also to call attention to the fact that a large proportion of the men on the Pennsylvania are comparatively young.

### Salary a Consideration

One phase of this subject that I have not touched upon is that of compensation. This is of primary importance in the mind of the graduate. I say this advisedly. Twenty men, out of college from one to five years, were questioned as to what their first consideration was in finding employment. In practically all cases the answer was money, and strange to say it was the immediate, rather than the future salary that was uppermost in their minds. The feeling seemed to be that, not having had an opportunity to earn anything as yet, in most cases, they wanted to get as much as possible at the outset; that they were young and had time to place themselves permanently at a later time.

Starting salaries on the railroads are comparable to or slightly above those in industry generally. These on the Pennsylvania are increased periodically. As the individual is promoted, his remuneration increases and, in many cases, is in excess of those in other classes of employment. As an added financial inducement, the railroad man is assured of a substantial pension upon retirement.

There is another consideration upon which earning capacity and advancement are largely dependent. That is how well a man likes the work he is doing. To most of us on the railroad, and to many in other lines of endeavor, railroading has a peculiar fascination. To men generally, a railroad is something alive, active and vital. To the railroad man himself, his work does not produce a dull life. It is filled with change and variety. It is not passive. It is a constant challenge to effort and ingenuity. It does not get into the rut of routine. There is constant conflict with the elements, and with those things that can go wrong with machinery and the teamwork of men. Then too, there is constant need for the sharpening of wits to be able to figure how far a dollar can be stretched, and the satisfaction of developing original ideas. The railroads offer the appeal that exists in any game where skill is brought into play to secure results. To the man so constituted as to enjoy competition and the satisfaction of doing things, railroad work is agreeable.

Many like positions of authority. They enjoy the directing of others. There is an understandable pride in leadership. The opportunity for this presents itself to the railroad officer. As such an officer, he automatically assumes a certain prominence in his com-

munity. As a railroad man, he stands for the railroad he represents, and his railroad usually ranks among the largest industries in his territory. The prestige of position is something that cannot be discounted entirely.

Summarizing, we may say that the college graduate taking up railroading seriously may expect a permanent position, with advancement, at better than average compensation, together with agreeable work in a respected occupation.

## Michigan Offers Up-to-Date Transportation Curriculum

By John S. Worley\*

The impact of a rapidly changing world is not confined to business and politics, but is felt by every social group. The field of education is probably affected more by these rapid changes than any other. This is true particularly because of the fact that, in order to keep abreast of the most modern trends, educators must anticipate and prepare their work to coincide with these social changes as they come about. It is by the preparation of new programs and curricula that educators are able to meet the needs of changing conditions, and it is probably because of this foresight that they are sometimes accused of being radical or ultra-socialistic.

Up to and including the early part of the present century, engineering education was of the most technical nature, with a strong tendency toward extreme specialization. In the transportation field the curricula consisted almost entirely of studies of the design and construction of railroads. However, in spite of the fact that the education of engineers was confined to this narrow field, executives of railways and other forms of transportation found that when these technically trained men were given higher positions of responsibility, they measured up to them most satisfactorily. Out of this has developed recognition of the fact that there is a large field for engineering employment with transportation companies, over and above that in their strictly technical engineering departments.

### Michigan Meets Needs

Recognizing this situation, the Engineering college of the University of Michigan established a Transportation division of Civil Engineering. The faculty members responsible for the work in this department have been engaged in the development of a most suitable curriculum, and in a study of the value of the services of those students who have thus specialized.

The present transportation curriculum consists of three parts, the first part, being made up of preparatory courses, contains those fundamentals upon which all engineering education is predicated, such as mathematics, engineering mechanics, physics, chemistry, drawing and the proper use of English. In addition, in this part, there are nine credit hours of economics, including accounting, and three credit hours of non-technical electives, making a total of 66 credit hours. The second part, designated secondary courses, includes courses in surveying, engineering mechanics, mechanical engineering, electrical engineering and transportation engineering, and involves 51 credit hours. Part one and two are required of all transportation students.

Part three, designated Professional Options, is subdivided into railroad, highway, automotive, aeronautic

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# Status of the Steam Locomotive in Great Britain\*

Principal steps in the evolution of British design—The present status as to thermal efficiency

## Part I

**T**HE progress of the steam locomotive can be viewed from several aspects, the most obvious being that of size and power. The advance in power has been continuous, but in recent years the limits of allowable size in this country have almost been reached, so increase in power per unit of weight, which is one form of efficiency, has been called for and achieved. In reliability, in lowness of repair costs, and as an effective means of moving traffic, the advance, although less obvious, has been equally steady. But in thermal efficiency—the net return in work done for each unit of heat supplied—it must be admitted that progress has been more halting, and for reasons which I shall explain, it has lagged behind the advances made in the use of steam in marine and land installations.

### Main Characteristics of British Locomotives Stabilized Ninety Years Ago

By the Fifties of last century, the details of British locomotive design had become more or less stabilized, largely as a result of the work of John Ramsbottom who introduced split piston rings of iron, steel, or brass; the screw reversing gear; displacement lubrication, and the water pick-up which enabled the locomotive to take water from troughs between the rails when running. From that time until the beginning of the present century, almost the sole increase in basic thermal efficiency was that due to an increase in average boiler pressure from 140 lb. per sq. in. to 180 lb. per sq. in.

The actual efficiency of the engine in running condition continued through all this period to fall far short of the theoretical figure, due to various cylinder losses arising from condensation, throttling, and leakage. Cheap fuel and the absence of any spur to action from alternative forms of transport did not provide any powerful urge to do better. Moreover, in few branches of engineering does the designer live in such close daily contact with his products throughout their working lives as does the railway mechanical engineer. The resulting preoccupation with reliability has tended to provide arguments against breaking away from practice which has been well tried in the past.

This long period of relatively slow progress served to crystallize ideas on design into a definite British school of thought, and however much the engines of the different railways might vary in color and shape, in the fundamentals affecting their thermal efficiency they were extraordinarily alike. Further, so well established did

this school become that it has persisted far into the present century and numerous examples of this basic design are still running today. Many of them have been built in recent years concurrently with more efficient types. Simple, reliable, and cheap to maintain, these engines move a considerable proportion of our traffic and are beloved of the operating departments.

### Three Stages of Improvement

Apart from isolated instances, the first considerable and lasting break-away from the almost traditional form in this country was the work of Churchward. In pioneer work carried out from 1902 on a gain was made in theoretical efficiency by extending the heat range, both upwards (by increasing the boiler pressure to 225 lb. per sq. in.) and downward (by reducing the exhaust pressure as a result of improved valve events). The gain in actual efficiency was even more marked, owing to the big cut in cylinder losses—hitherto looked upon as unavoidable—achieved by the use of long-lap valves, and cylinders with direct ports and passages and minimum clearance volume. Churchward had the vision and the courage to combine all of these features, some of them borrowed from French and American practice, into a range of simple standard locomotives which were many years ahead of their time. It is interesting to recollect that these improvements were evolved from a consideration of first principles and by intelligent observation of what was going on in the world and were not the result of scientific testing or research as we now know them.

The next notable advance was the introduction of the superheater. Attempts to produce a practical superheater had been made for many years, but the smoke-type design originated by Schmidt in Germany was the first successful application, and between 1908 and 1912 superheating became accepted practice on practically all British railways. The steam temperature of about 600 deg. F. obtainable thereby reduced condensation losses to a negligible quantity and gave locomotive engineers a present of a 15-20 per cent drop in actual coal consumption, with no other effort on their part than the application of a relatively simple apparatus.

Paradoxical as it may appear, this windfall actually had the effect of retarding the further progress in improving thermal efficiency for many years and led attention away from the fundamentals of Churchward's success. With so much gained from superheating, locomotive engineers were unwilling to believe that anything of much value could be obtained by abandoning their traditional cylinder designs and valve events. Indeed, it was held to be one of the virtues of super-heated steam that it could successfully thread its way through tortuous passages and past valves of small diameter. Ex-

\* From the presidential address of W. A. Stanier, M. I. Mech. E., entitled "The Position of the Locomotive in Mechanical Engineering," delivered before The (British) Institution of Mechanical Engineers on October 24, 1941. Mr. Stanier is chief mechanical engineer of the London, Midland & Scottish.

cept for the general adoption of piston valves, which, with the wide piston rings then in use, did little to reduce steam leakage, no fundamental alteration in cylinder and valve-gear design was made.

Churchward, on the other hand, realizing that his own designs with their greatly improved cylinder efficiency, produced results as good as, if not better than, the superheated engines on other lines, contented himself with applying only a low degree of superheat, with steam temperatures in the region of 500 deg. F. Thus, the third stage of improvement, that of combining improved cylinder and valve-gear design with steam temperatures of 600 deg. F. or so, was delayed until the period of the last war. Except for a single small class of 4-4-0 engines on the Lancashire & Yorkshire, which combined these features almost by accident in 1908, the true value of which was not appreciated by the owning company, the first engines in this country so built were those of Maunsell's 2-6-0 design of 1917 for the South Eastern

coal consumed per drawbar horsepower-hour compared with those which were the best available in 1926.

Turbines with condensing plant and high-pressure water-tube boilers have been tried in a number of ingenious applications, but none survives in this country at the present time. Indeed, the only "abnormal" locomotive type available for everyday active service is the L. M. & S. "Turbomotive" which substitutes in the simplest possible manner a turbine and gear drive for the normal reciprocating layout. No condenser is fitted, so the increase in basic thermal efficiency, compared with a standard locomotive, is small. There are possibilities, however, of more economical working at high power outputs, while the purely rotary working parts, being totally enclosed, may promote lower upkeep costs. This engine has now run 185,700 miles in express service, but data are not yet available for a final summing up of all the results. Some particulars of its fuel consumption in comparison with that of normal types are given in Table III.\*

Of non-steam motive power, the Diesel engine has so far, except for some light rail cars, established itself here only in the field of shunting locomotives for intensively operated freight yards. As very few electric locomotives are in use, it does not enter the scope of this address.

### The Present Thermal Position

At the outset I must repeat that for one reason and another we have hitherto been without means in this country for the scientific testing of locomotives. Comparative testing there has been in plenty, but because the locomotive travels over an undulating track and within severe restrictions of space and weight, and, moreover, since its operating conditions call for continual variation in speed and load, it has been much more difficult than in land or marine work to isolate all the variables, and obtain absolute test figures for the amount of heat turned into useful work in the cylinders. It is necessary, therefore, to estimate them, but this can nevertheless be done with some degree of probability from the tests at variable speed on the road—the only tests we have so far been able to carry out in this country. These road test figures can be supplemented by data provided by constant-speed testing on the line and on stationary test plants abroad.

### Thermal Efficiency

Table I attempts to set out the relative thermal efficiencies for different stages in the development of steam motive power, showing first of all the basic theoretical efficiency of the cycle, then the actual engine and boiler efficiencies and, finally, an overall thermal efficiency for the plant as a whole on a basis of indicated horsepower.

The record of the locomotive is not, as is sometimes thought, entirely bad, and Table I shows clearly where it has advanced and where it still falls short.

### Boiler

Thermally, the boiler is the most satisfactory part. The high heat absorption rate of the water-enclosed inner firebox and the rapid heat transfer arising from high gas speeds along the tubes, combine to produce a high heating-surface efficiency which does not drop appreciably at the maximum output of which the boiler is capable. The principal loss is that due to fuel being

Table I—Approximate Best Thermal Efficiencies of Various Steam Locomotives

	Representative saturated locomotive built 1880	Representative superheated locomotive built 1912	L. M. & S. Coronation superheated 4-6-2 simple	Chapelon superheated 4-8-0 compound	Advanced steam power-station practice, electric drive*
Working pressure, lb. per sq. in....	160	180	250	295	1,350
Steam temperature, deg. F. ....	371	580	615	750	950
Heat drop, B.t.u.'s per lb. of steam.	150.8	187	213.8	253	610
Theoretical efficiency of cycle (Rankine), per cent .....	12.8	15.4	17.2	19.7	48
Theoretical steam consumption per i.hp.-hr., lb. ....	16.9	13.6	11.9	10.0	..
Actual engine cycle efficiency, per cent .....	7.64	9.6	14.2	16.5	38†
Estimated steam per i.hp.-hr., lb....	28.3	22.0	14.5	11.7	..
Ratio of actual efficiency to theoretical efficiency of engine, per cent..	60	62	82	84	79
Boiler efficiency, per cent .....	68	75	76	78	90
Overall thermal efficiency of locomotive on i.hp. basis, per cent.....	5.2	7.2	10.8	12.8	34.2‡

\* Based on particulars given in Sir Leonard Pearce's Thomas Hawksley Lecture, Proceedings Institution of Mechanical Engineers, 1939, page 305.

† Overall efficiency based on units generated; i. e., including factor for efficiency of generator.

‡ Efficiency at motor shaft, corresponding as nearly as possible to efficiency in cylinder of direct-drive steam locomotive; i. e., minus the final drive in each case.

& Chatham, followed by the London, Midland & Scottish mixed-traffic engines of the same wheel arrangement in 1926. After that date, these features became fairly general throughout the country for new construction.

The most recent stage of development has been a general refining of all the above features of design, and their application to the smaller as well as the larger types of engines on the different railways.

The general advance in the past twenty years has been greatly facilitated by the railway grouping which, by bringing all kinds of locomotives into open competition which had never previously been compared on the same work, threw into high relief those types which were inferior and made it possible to justify their replacement by more economical units. The L. M. & S., in particular, embarked on a bold policy of breaking up the old and inefficient types of constituent companies. Today, 2,000 engines on that line have cylinders of modern design and long-lap valve gear, as against only 25 in 1923. Of the total stock, 56 per cent is superheated, and the engines working the heaviest Anglo-Scottish services show a reduction of 40 per cent in

\* Table III will appear in the second part of the article.



drawn off the firebed by the fierceness of the draft and expelled unburned from the tubes, at high output of power. The overall efficiency exceeds 80 per cent at low rates of combustion and falls along a practically straight line to about 50 per cent when the boiler is forced to the limit of its output which corresponds to about 200 lb. of coal per sq. ft. of grate per hour. Boilers which are proportioned to work at an average firing rate

are capable of realizing in the cylinders as much as 84 per cent of the utmost that theory allows.

As against this, a large number of the older engines still running do not achieve more than 60 per cent in this respect due to severe cylinder losses. These consist of condensation, internal leakage past valves and pistons, throttling of the steam due to insufficient port and passage areas, and high back pressure due to restricted exhaust events. Such losses have been greatly reduced by superheating, by the introduction of valves and pistons having numerous narrow rings, by improved lubrication, and long-lap valve gear. More recently the work of Chapelon in France has underlined the importance of sufficient area of valves, ports, and passages, and the benefit of streamlining them internally as far as possible, to reduce resistance to the flow of steam; and modern cylinder designs have been still further improved in this respect.

All the last-mentioned improvements are applicable to the normal simple-expansion engine, and at the outbreak of the war designs were on the board for a modified Coronation engine which would carry 300 lb. per sq. in. boiler pressure and a steam temperature of 750 deg. F., embodying the main results of Chapelon's investigations, but without making use of compound expansion.

### Compounding

Although a standard feature of marine reciprocating engine design, compounding has not found extensive favor in any country other than France. In England, it has been the subject of repeated trials—no less than 12 per cent of all the locomotive papers ever read before the Institution are on compounding—and in theory it has obvious advantages over simple expansion. These advantages are especially marked at higher working pressures, above 300 lb. per sq. in. where, if expansive working is attempted within the confines of a simple cylinder, either the cut-off has to be so early that the turning moment becomes undesirably uneven, or alternatively with a reasonable cut-off, the exhaust pressure is too high, causing loss by incomplete expansion. It must be confessed that many British attempts have contained serious defects: condensation caused serious loss and lack of understanding of the principles of steam flow and has often rendered the engines more sluggish than their simple-expansion contemporaries.

The advent of superheating, which has brought fresh life to the compound on the continent, has only been applied in any scale to one British type—the Midland compound—and within the limits of its size good work has been and still is being done by this class. It has, however, never been modernized as regards its cylinder and valve-gear design, so its actual efficiency is below that of the present-day simple-expansion engine.

It is also possible to understand now why the French "De Glehn" compounds imported by the Great Western Railway in 1903 and 1905 did not give results superior to the simple-expansion designs of Churchward. Chapelon's work has indicated how serious was the effects of restrictions in ports and passages in this early design. Now that modern French investigation has so extended our knowledge of how a compound locomotive should be designed, the question naturally arises why we should not in this country abandon simple for compound expansion.

The answer is that the thermal gain would be more than counteracted by a mechanical loss. It is impracticable to combine within the British loading gage both the large low-pressure cylinders which are required and

Table II—Particulars of Representative Locomotive Boilers (L. M. & S.)

	4-6-2 Corona- tion	4-6-0 mixed traffic	2-6-4 tank	4-4-0 com- pound	0-6-0 standard freight
Working pressure, lb. per sq. in. ....	250	225	200	200	175
Maximum barrel diameter, ft.-in. ....	6-5½	5-8½	5-3	4-9½	4-9½
Length between tube plates, ft.-in. ....	19-3	13-3	12-3	12-3	10-10½
Length of firebox, ft.-in. ....	8-6	9-2½/10	8-6	9-0	7-0
Evaporative heating surface, sq. ft.:					
Tubes .....	2,577	1,478.7	1,223	1,169.7	1,033.7
Firebox .....	230.5	171.3	143.0	147.3	123.8
Total .....	2,807.5	1,650.0	1,366.0	1,317	1,157.5
Superheated surface, sq. ft. ....	856	359.3	245	291	253
Grate area, sq. ft. ....	50	28.65	26.7	28.4	21.1
Free area, sq. ft.:					
Small tubes .....	3.23	2.22	2.04	1.89	1.89
Large tubes .....	3.66	2.54	1.89	1.58	1.58
Total .....	6.89	4.74	3.93	3.47	3.47
Total free area through tubes as percentage of grate area	13.8	16.54	14.7	12.2	16.5
Weight of boiler empty (fully mounted), lb. ....	63,112	39,928	31,668	35,488	29,904
Approximate steam production, lb. per hr. ....	33,000	20,000	17,000	17,000	14,000

of 50-60 lb. per sq. ft. grate per hour are capable of maintaining efficiencies in the region of 75 per cent, a figure which bears comparison with other types. The efficiency cited holds good for a wide variety of individual designs.

This type of boiler has also further solid advantages. It follows varying demands with great rapidity, having a considerable thermal storage capacity in the large quantity of water carried. It is capable of severe overload and is not too sensitive to the quality of the water, while its weight and size are very moderate in relation to the output. Its cylindrical body possesses considerable rigidity and strength. Table II gives particulars of some representative boilers.

Without condensing, the thermal gains due to increasing the working pressure are only obtained at a diminishing rate, and beyond about 300 lb. per sq. in. the gain due to successive increments in pressure falls away rapidly. Since it is possible to design a normal locomotive type boiler for such a pressure, there is little urge or justification for departing from the conventional type merely to secure thermal gains and alternative water-tube designs are attractive only as a possible means of eliminating stays, to assist mechanical maintenance; they become of real interest as higher working pressures are envisaged in conjunction with condensing.

### Engine

A careful distinction must be made in considering engine efficiency. As Table I has shown, the theoretical thermal efficiency even today lags far behind that of the power station, but this is largely due to the difficulties of finding space for the essential features of high-pressure turbo-condensing design as well as in the accompanying weight restrictions. Thus, in basic efficiency it is physical limitations which have offered obstacles to progress. In utilization of the available theoretical efficiency, on the other hand, the locomotive has a very good record of progress, and the best modern designs

the bearing and crank dimensions shown by experience to be essential for freedom from heated bearings and for high mileage between repairs.

For triple and quadruple expansion the difficulties are still greater and there are only two examples of which I have any record. In 1895 a light 2-2-2 engine was converted by F. W. Webb from a simple to triple expansion, but this effort was entirely unsuccessful. Then, there is the modern 4-8-0 engine, L. F. Loree of 1933 on the D. & H., concerning which no published results have yet been seen in this country; but I understand that this locomotive has now been withdrawn from service.

*(To be concluded)*

## Hearing on Pullman Rate Application

**O**FFICERS of the Pullman Company appeared before the Interstate Commerce Commission this week in support of the company's application for a 10 per cent increase in sleeping and parlor car rates. The hearing in the proceeding, docketed as Ex Parte No. 150, was held before Commissioner Claude R. Porter on February 17 while oral argument followed the next day.

Sitting with Commissioner Porter was Examiner Koch and the following representatives of state commissions; A. A. Betts, chairman of the Arizona Corporation Commission; J. J. Murphy, chairman of the South Dakota Public Utilities Commission; G. McConaughy, chairman of the Public Utilities Commission of Ohio; and J. C. Darby, member of the Public Service Commission of South Carolina. Pullman witnesses included D. A. Crawford, president of the company; L. S. Taylor, vice-president in charge of finance and accounts; E. P. Burke, passenger traffic manager; and H. J. England, general auditor. The presentation was under the direction of L. J. Greenlaw, general counsel.

### Present Income Won't Absorb Wage Increases

Generally Pullman's presentation was to the effect that wage increases which it made following the upward adjustment of railroad wages in December will cost \$5,687,000 a year, and payroll taxes will be up \$337,000—a total increase in expenses of \$6,024,000. This figure was related to the net operating income of recent years (\$2,351,000 in 1941 and \$2,265,000 in 1940) to show that such income on its present basis is insufficient to absorb the wage increases. Also, it was pointed out that costs of materials and supplies have risen, and continue to rise. On the basis of 1941 operating revenues, the proposed 10 per cent increase in rates would yield \$6,165,000, or approximately the amount involved in the wage increases. No one appeared at the hearing in opposition to the increase; and the commission had received no protests up to that time.

Opening the presentation in support of the application, President Crawford first discussed the wage increases and then proceeded to outline some of the conditions which Pullman has encountered in connection with the heavy troop movements it is being called upon to make. This development, he said, was unexpected, and it is growing to unexpected proportions, bringing a "considerable demand" for sleeping cars of the tourist type. In order to handle the troops Pullman has put every available car into service, even reconditioning some which had been retired. It has segre-

gated for the handling of troops a fleet of 1,500 cars out of its total fleet of 7,000 cars; but troop-movement peaks have had to be met with cars normally assigned to civilian service. On some such occasions as many as 2,900 Pullman cars have been engaged on troop movements, Mr. Crawford said.

### Revenue Per Passenger-Mile Down

The handling of troops, he went on, has injected a new element into Pullman's business. The most graphic portrayal of the change, Mr. Crawford added, is in the average revenue per passenger-mile which, "because of the low-rated troop movements," was down to 6.039 mills in 1941 as compared with 6.3 mills, 6.4 mills and 6.5 mills in the three previous years. Troops travel on the tourist rate. Mr. Crawford anticipates that there may be a continuing increase in the troop movements; and in that connection he mentioned the Association of American Railroad's proposal that the War Department acquire a number of specially-designed troop-carrying cars.

Despite the heavier loading in the troop movement service, Mr. Crawford said that Pullman just about breaks even on that phase of its business. This is because the troop cars are operating in revenue service only about one day in four; and the company is unable to exercise its usual control over the idle time of equipment and employees. And the only increase which Pullman can now foresee in its 1942 business over 1941 will be in the troop movement service; civilian business in January was actually a little below that of January, 1941. Moreover, Mr. Crawford called the troop-movement situation uncertain. He suggested that conditions might change radically if the government adopted the A. A. R. recommendation and acquired special troop cars. So far as Pullman is concerned, it is ready to do whatever the government desires. As Mr. Crawford put it, his company could operate such special troop cars for the government; or it could turn over its own troop-car fleet and then operate them on a fee basis. It wouldn't surprise Mr. Crawford if troop travel were taken over by "some sort of a government pool."

Vice-President Taylor explained the wage increases in some detail and also testified with respect to other data included in the principal Pullman statistical exhibit. Asked by Examiner Koch to identify Pullman's principal competitor, Mr. Taylor replied that in his opinion it was the railroads with their improved day-coach service. General Auditor England then testified briefly, and he was followed by Passenger Traffic Manager Burke, the concluding witness.

### Won't Affect Travel

Mr. Burke described the rate proposal as one which would increase all Pullman charges uniformly by 10 per cent. He stressed that part of the petition which asked authority to dispose of all fractions by making all fares end in multiples of five, saying that fourth section difficulties would thereby be avoided. It was Mr. Burke's view that the proposed increases would have no important effect on travel. He pointed out that two-thirds of all Pullman passengers would pay no more than 30 cents over charges paid at present; and three-fourths would pay no more than 35 cents additional. Because experiments with reduced rates for upper berths have not been effective, Mr. Burke said that it was decided to make no exception in that connection. Examiner Koch asked about the possibility of increasing the so-called



"sub-normal" rates, the most important being the rates between New York and Chicago. Mr. Burke said that the preparation of tariffs in that connection would take a long time; and he believed that the ideal way to adjust such out-of-line situations would be when rates are being reduced. He did, however, agree with the examiner's suggestion that there would be no reason why Pullman should not follow up the present proceeding with proposals to increase the sub-normal rates. Mr. Burke estimated that if all sub-normal rates were increased to the normal basis, the result would be an increase of about \$1,605,000 in Pullman annual revenues.

With Acting I. C. C. Chairman Aitchison presiding, the oral argument was held on February 18 when General Counsel Greenlaw presented his highlight review of the evidence offered on the previous day. Among other questions from the bench were several relating to the free transportation provided by Pullman. In the course of such discussion it was brought out that in 1940 Pullman carried 464,293 non-revenue passengers and 14,765,316 revenue passengers. Mr. Greenlaw pointed out that both Pullman and the railroads have been curtailing free transportation; and he expressed the view that if all free transportation were eliminated the net result of all pass holders paying their fares would be in favor of Pullman.

## Seaway Power Link Hit As Crippling War Effort

(Continued from page 411)

a government-owned power system over 300 miles long, leading to a waterside steam plant in New York City and ruining the finest scenery in the state on its way? Certainly it is no answer to this question to say that the only consideration is speed, and to charge those who oppose this waste with impeding the war effort."

The state legislature was given opportunity to review the scheme only with respect to the right of the line to cross state forest reserves. The Republican majority passed the authorization bill on February 9—under protest—on the grounds that the line would be built anyway—around the forest reserves—if permission were not granted. But argument on the floor blasted the scheme *in toto*, principal objections being to (1) the St. Lawrence power scheme; (2) government competition with private utilities; and (3) the attempt to give approval-power over such federal projects to appointed state officials. Several senators also wondered why the federal government expanded the aluminum plant at Massena if it knew that power was not available and would have to be brought in from a distance.

The New York "Herald Tribune," pointing out that the project is one "which President Roosevelt has had in mind for at least a dozen years and which he has tried in many ways to put across," characterized it as a "scheme to use the war emergency to camouflage public construction of a link in a great government-controlled power grid in the northeastern states."

Engineers of the state Public Service Commission also attacked the project and its "daddy," the St. Lawrence Seaway, in a report on state power resources made public on February 11. They characterized the scheme as "wasteful of priority materials and labor" and advocated that: (1) the aluminum plant should be located in or near New York city; (2) that, if necessary, the Massena plant should be serviced by re-inforcement of private facilities, plans for which were undertaken by the utilities but suspended "in view of the government trans-

mission proposal, which would involve a duplication of new facilities built by the companies."

But the line will probably be built; Army engineers opened bids for construction of the line on February 7.

## College Men Have Large Place in Modern Railroading

(Continued from page 414)

and marine engineering, each involving 23 credit hours. These subdivisions permit the student to major in that field in which he is particularly interested. The curriculum has a total of 140 credit hours, and is conceived with the idea of giving the engineer sufficient technical training to enable him to pursue engineering in that branch of transportation he has elected. In addition, it includes sufficient courses in economics, English, regulations and other subjects, which today form so large a part of the transportation executive's work, that it is possible for him to undertake executive work in his particular chosen field.

The credit hour referred to in the foregoing is equivalent to one hour's recitation per week for a semester of 18 weeks, including examinations. In conjunction with the above curriculum are field inspections, library reading and minor research projects of a character in keeping with the student's ability.

Our experience with this curriculum and a study of the operation of our transportation agencies lead us to the inevitable conclusion that there lies immediately ahead an important era in education, which will not only be of great benefit to the student, but which will give to our transportation agencies a source from which to recruit better-trained young men.

## New Book . . .

*The Two Footers*, by H. T. Crittenden. 139 pages. 9 in. by 6 in. Bound in paper. Published by the Railway & Locomotive Historical Society, Inc., Harvard Business School, Boston, Mass. Price \$1 for members, \$2 for non-members.

This special bulletin of the Railway & Locomotive Historical Society is a compilation of virtually all known authentic information about the ten 2-ft.-gauge railroads which formerly flourished in the United States. They are, in order: Billerica & Bedford; Sandy River & Rangeley Lakes; Bridgton & Harrison; Monson; Gilpin; Mount Gretna Narrow Gauge; Kennebec Central; Laurel River & Hot Springs; Wiscasset, Waterville & Farmington and Silver City; Pinos Altos & Mogollon. Of them only the little Monson in Maine remains.

The "two-footers"—most of which were in Maine—were principally enterprises initiated by localities not fortunate enough to be located on an existing railroad. The gauge was selected under a mistaken notion that it would enable cheaper construction. Actually, as the "Railroad Gazette" stressed again and again in the 'Eighties, steel rail costs just as much whether it is 2 ft. apart or 4 ft. 8½ in. apart, and any savings resulting from narrower bridges and rights-of-way would most certainly be offset by the cost of trans-shipment to and from standard-gauge lines.

Nevertheless, the detailed stories of these little railroads are significant, if only for their account of the struggles of these communities to link themselves with the outside world by rails. The capital was drawn from little people in regions where hard cash was scarce. It would be well to remind the castigators of capitalism that thus did most wealth-producing machinery in this country have its origin. The text is interesting, especially so for an author who is primarily a student rather than a professional writer, and the photographs are copious, rare and excellently reproduced.

# NEWS

## How to Stave off Anti-Trust Suits

Biddle says carriers must not act in cahoots except as directed by ODT

Replying to a recent request from Director Eastman of the Office of Defense Transportation for the establishment of an understanding on the matter between ODT and the Department of Justice, Attorney General Biddle has restated his Department's anti-trust policy "with particular reference to the transportation industry." In his letter to Mr. Biddle, Mr. Eastman told how ODT has been working through national and regional associations of carriers, adding, however, that "there is some apprehension upon the part of many carriers that such cooperative action, taken at the request of or as directed by this Office, will subject them to the penalties of the anti-trust laws." Generally, the policy stated by Mr. Biddle would permit cooperative action among the carriers at the direction of ODT; but "in the case of all plans or procedure, however, the Department reserves complete freedom to institute civil actions to enjoin the continuing of acts or practices found not to be in the public interest and persisted in after notice to desist."

Making public the correspondence on February 17, the Attorney General said that "the war effort will require joint action among carriers and the cooperation of every form of transportation on railroads, public highways and public waterways." He added:

"It is important, however, that the necessity for cooperation and joint action among carriers not be used as a cloak under which private groups may secure permanent control over competition in the transportation field. The war emergency should not be the occasion to reestablish the transportation controls which have created hardships upon farmers and small businesses prior to the development of motor and water carrier transportation.

"Necessary arrangements for pooling and cooperation between carriers for the war effort must be so directed and controlled that they will not end in permanent mergers and consolidations. Otherwise, the public will lose the great competitive advantage of the highways and waterways built at public expense. . . . The assistance of the Anti-Trust Division will be directed solely against the acquisition of power by private groups which go beyond the jurisdiction or the intention of

the Office of Defense Transportation. It will seek to aid that Office in removing any present restrictions on transportation services which prevent the free flow of traffic. It will seek to cooperate with that office in the long-view policy established by Congress of maintaining effective competition in the field of national transportation."

In his letter, Mr. Eastman referred to the role of ODT in the defense picture and then expressed the view that federal possession and control of transportation facilities ("something to be avoided if at all possible") "certainly should not occur if future transportation performance continues to be as efficient as in the past." And Mr. Eastman attributes the performance thus far "in very large part to the high spirit of cooperation which carriers have shown, and their quite earnest desire to accomplish under private management the larger tasks lying before them."

"This successful cooperation," the ODT director went on, "has been brought about, to an important degree, by national and regional associations of carriers, established by the carriers of various types, for the primary purpose of increasing carrier efficiency and improving carrier service. It is my judgment that this Office should work through these agencies in every proper and practicable way, even though many of the demands or directives to be issued by this Office may result to some extent in lessening competition between carriers. Whether we work through the agencies or not, it is inevitable that many, if not most, of our projects and plans will require some sort of cooperative or joint action among carriers, or at least mutual understanding of the respective parts which individual carriers must play in a given project. It is not expected that the carriers or the carrier associations will change of their own volition the character of the activities and functions normally performed during past years, nor that they will now undertake upon their own responsibility any joint action which would tend unduly to restrain competition. It is expected that whatever new functions they may perform, involving such matters as joint service, routings, diversions, embargoes, and the like will be performed at the request or pursuant to the direction of this Office, and this letter is limited to the latter situations."

Here came Mr. Eastman's aforementioned reference to the apprehension on the part of carriers, and his request for the establishment of an understanding between ODT and the Justice Department. He then continued as follows:

In reply to an inquiry recently made to you by Mr. Wayne Coy of the Office for Emergency Management, involving a problem which arose in  
(Continued on page 425)

## Words of Praise From Sec'y Ickes

Says roads move "amazing" volume of oil, but he still wants Tex.-N.Y. pipeline

"The railroads are doing an excellent job in moving a large volume of oil," declared Petroleum Coordinator Harold L. Ickes in a statement which he read to the oil subcommittee of the House committee on interstate and foreign commerce on February 17.

Mr. Ickes appeared in order to bring the subcommittee up to date on the oil situation as it affects the national defense. He also informed the subcommittee that he believed the 24-inch crude-oil pipe line projected last year from the East Texas oil fields to the New York refining area was very necessary at this time and that he proposed to renew his application to the War Production Board for an allocation of steel for the line.

Last Fall the predecessor to the WPB, the Supply Priorities and Allocations Board, refused Mr. Ickes the steel for the line, saying that it was needed more in other defense fields.

In marked contrast with the verbal attack which Mr. Ickes made upon J. J. Pelley, president of the Association of American Railroads, last Fall at hearings before the special Senate committee headed by Senator Maloney, Democrat of Connecticut, the Petroleum Coordinator told the House subcommittee that the A. A. R. president "is working closely with the Office of the Petroleum Coordinator and I, for one, am very happy about the results that have been achieved." He went on to declare that the oil companies have been urged to use tank cars, that they are using tank cars, and that they will continue to use them to the absolute limit. In Mr. Ickes' words, "There is no occasion for argument on this point."

After pointing out that Deputy Petroleum Coordinator Ralph K. Davies had telegraphed the 11 eastern oil companies which have tank car facilities on January 16, requesting that immediate steps be taken to get the tank cars rolling to the fullest extent possible, Mr. Ickes related to the subcommittee that by the week ended January 31 the amount of oil brought into the eastern area soared to 164,700 barrels daily, an all-time record that greatly exceeded even the peak of last October.

"We were delighted—but we hadn't seen anything yet," continued Mr. Ickes. "Dur-



ing the following week, the oil companies and the railroads set up a record which, I am frank to say, I had doubted was possible. They moved the amazing total of 223,000 barrels a day into the 17 eastern states—an increase of 279 per cent in four weeks. This great increase is not so much due to the number of tank cars that are being used as to the greater efficiency of their handling, both by the oil companies and by the railroads. Long hauls have taken the place of short ones; loading and unloading time have been reduced; running time has been greatly speeded up."

"Gentlemen, I want to take this opportunity to say that I believe that this performance warrants our highest praise, our genuine appreciation. Credit is due, not only to the oil industry, but to the railroad companies. Both of them are leading the way for some of our other industries in our war effort."

"However," concluded the Coordinator, "it would be well to bear in mind, notwithstanding a performance far exceeding anyone's anticipations that the railroads could do in the way of transporting oil, that there is a definite limit to what can be carried in tank cars. Even if there should be no interruption of the services of the railroads due to enemy action, the demand upon them for deliveries of other commodities, particularly the output of our war manufactories, will increase. Take the matter of coal for instance. As Coordinator of Hard Fuels, I have been urging the building up of stock piles of coal and this must be done if our great coal-burning industries and the homes of the country are to be assured of a steady supply next Winter. To carry more coal might mean less ability on the part of the railroads to transport more oil."

"We may reach the point where the railroads, however efficiently they are run—and to date they have been highly efficient—may be taxed to that degree that priorities will have to be declared. In such an event, there are likely to arise questions calling for nicely balanced decisions, which inevitably will involve results vital to the nation and of concern to the individual citizen. This is only an involved way of saying that we cannot take anything for granted, as there was a disposition in some quarters to do with respect to petroleum last Fall. Situations may vary from day to day and we must be prepared to meet those situations frankly and with courage."

The Petroleum Coordinator also presented to the subcommittee a list of recommendations drafted by the heads of the principal oil companies in the eastern area. Recommendation Number 7 reads as follows:

"The industry is using more tank cars to bring crude and products into District No. 1 than at the peak of the movement last Fall, and in addition, has substantially more tank cars on order than it has been able to secure. It is accordingly urged that the railroads be requested to speed up tank car turn-around, and that tank car users in Districts 2 and 3 be asked to make available about 10 per cent of their cars to be used in this emergency movement."

### Hearings Set on Land Grant Repeal Bill

Hearings before the House committee on interstate and foreign commerce on H. R. 6156, the bill introduced by Representative Lea, Democrat of California, to repeal completely land grant rates were scheduled to begin on February 19, according to a committee announcement.

### Pullman Car to Be Named "Wake Island"

The U. S. Marine Corps and the Pullman Company announced on February 16 that a Pullman car will be named "Wake Island" in tribute to the gallant defense of that island last December by a small force of marines. Dedication ceremonies, with numerous high officials attending, are expected to take place at Chicago in March.

### Maine Central Affiliate's "Grandfather" Application Approved

The Interstate Commerce Commission, Division 5, has granted the Maine Central Transportation Company, affiliate of the Maine Central, a "grandfather-clause" certificate covering its bus operations on five Maine routes in the territory served by the parent railroad. The same decision denied an alternative application covering the same routes which had been filed by the Maine Central.

### Urge Maximum Efficiency in Oil Tank Car Movements

A resolution urging maximum efficiency in moving crude oil by tank cars to the East coast was adopted at Houston, Tex., on February 13, by the Transportation committee of District No. 3 under the petroleum co-ordination setup. The resolution requested shippers and consignees to load and unload cars promptly seven days a week and to use trucks instead of tank cars on movements of 25 miles or less.

### Relaying Rail Schedule Revised

Minneapolis, Minn., has been revoked as a relaying-rail basing point in amendment No. 2 to price schedule No. 46 (Relaying Rails), Leon Henderson, Administrator of the Office of Price Administration, announced on February 16. Duluth, Minn., has been substituted for Minneapolis as a basing point. The change, it was noted, was made because it was found that Minneapolis was less of a relaying rail center than Duluth. The amendment is effective as of February 6, 1942.

### Equipment on Order

Class I railroads on February 1 had more new freight cars on order than on any corresponding date on record, according to the Association of American Railroads. New freight cars on order on February 1 totaled 68,070 compared with 41,600 on the same date last year.

The February 1 total included 41,959 box, 21,260 coal, 1,274 refrigerator, 2,244 flat, 300 stock and 1,033 miscellaneous.

Class I roads on February 1 also had 543 new locomotives on order, of which

249 were steam and 294 electric and Diesel-electric. On the same date last year, there were 238 new locomotives on order, which included 120 steam and 118 electric and Diesel-electric.

Class I roads in January put in service 8,143 new freight cars compared with 6,525 in the same month last year. New locomotives put in service in January totaled 71, of which 26 were steam and 45 electric and Diesel-electric. In the same month last year 47 new locomotives were installed in service, which included 15 steam and 32 electric and Diesel-electric.

### Ban on Truck Sales Extended

The ban on sales of 1942 model light, medium and heavy trucks and trailers has been extended from February 11 until February 28 by the War Production Board. Rationing plans for these vehicles have not been completed, the announcement of the extension said.

It was stated, however, that some vehicles will be released on individual appeal by letter or telegram prior to the issuance of the rationing plan if both the purchaser and manufacturer or dealer certify that a particular vehicle has been constructed to specifications so as to make it not acceptable for any use other than that of the specific purchaser.

### Accounting Division Cancels Convention

The 1942 annual meeting of the Accounting Division, Association of American Railroads, which had been scheduled for June 22-25 at New York, has been cancelled. This action, revealed in a February 12 circular from Division Secretary E. R. Ford, was taken by the Division's general committee "because of the national emergency."

Present officers and members of the standing committees "will continue in office until such time as an annual meeting is held." The present chairman of the Division is G. T. Carmichael, comptroller of the New York, New Haven & Hartford; and the first vice-chairman is E. A. Leslie, comptroller of the Canadian Pacific.

### New Haven Indicted on Elkins Act Charge

A federal grand jury in session at New Haven, Conn. has returned an indictment in 12 counts against Howard S. Palmer, James Lee Loomis and Henry B. Sawyer in their capacity as trustees of the New York, New Haven & Hartford, according to advices reaching the Interstate Commerce Commission.

The indictment, says the commission announcement, charged wilful failure to observe tariffs in violation of section 1 of the Elkins Act by delivery of order-notify shipments at Hartford, Conn., and Bloomfield in advance of the surrender of the bills of lading. Such a practice, the statement continues, constitutes a violation of Rule 7 of the Consolidated Freight Classification which requires that original order bills of lading properly endorsed shall be surrendered before delivery of property at destination except in those instances where the bill of lading has been

lost or delayed, in which event the property may be delivered in advance of the surrender of the bill of lading provided that certain precautions named in the rule are taken by the carrier to insure itself against loss if the bill of lading is not surrendered to it ultimately.

The statement goes on to declare that there was no loss or delay of the order-notify bills of lading for the shipments upon which the indictment was based, and the parties to whom the shipments were delivered could have obtained the bills of lading and surrendered them to the carrier in advance of the delivery of the shipments by paying the drafts which had been attached to the bills and sent to banks at Hartford and Bloomfield for collection. Substantial periods of time elapsed between the delivery of the shipments and the ultimate surrender of the bills of lading to the carrier, the statement concluded.

The matter was investigated by the commission's Bureau of Inquiry which assisted in the presentation of the case to the grand jury.

### Would Have Roads Check Operations Under Service Order 68

Suggesting that strict application of Service Order 68 recently issued by the Interstate Commerce Commission might mean "cross-haul of equipment in some cases and difficulty in filling orders for specific types of cars that might call for additional expense," C. H. Buford, vice-president of the Association of American Railroads, has advised member roads to check their operations under the order.

As noted in the *Railway Age* of February 7, page 350, Service Order 68, effective February 15, suspends tariff rules covering the furnishing, substitution, and use of multiple cars for single shipments. Mr. Buford asks to be advised "if there is anything about the order that will prove unduly burdensome," so that the A. A. R. "can handle it further with the commission."

### McAuliffe, Railroad Fuel Expert, Heads Mining Engineers

Eugene McAuliffe, who headed the Fuel Conservation section of the United States Railroad Administration during the last war and is an outstanding figure in the railroad fuel field, was installed as president of the American Institute of Mining & Metallurgical Engineers on February 10. Now special representative of the president of the Union Pacific and president of the Union Pacific Coal Company, with headquarters at Omaha, Nebr., Mr. McAuliffe has been in the railroad business since 1886. He organized the International Railway Fuel Association in 1908 and served as its president until 1910, and is the author of several treatises, including "Railway Fuel," published in 1927.

### Frisco Gets Truck Routes

Subject to the usual conditions designed to insure that the highway operations shall remain auxiliary to or supplemental of rail service, the Interstate Commerce Commission, Division 5, has granted to the Frisco Transportation Company, affiliate

of the St. Louis-San Francisco, certificates covering common-carrier trucking operations over four Arkansas routes. The routes are between Walnut Ridge and Datto; Nettleton and Lake City; Osceola and Marked Tree; and Armoral and Barfield.

The conditions were supported by the Railway Labor Executives' Association which did not object to the granting of the certificates but argued "for some restrictions to assure preservation of present rail operation."

### Roosevelt Discusses Rail Line to Alaska

Questioned at his press conference on February 17 concerning the proposed highway from the United States to Alaska, President Roosevelt said that it might have to be discarded temporarily to permit the establishment of transportation facilities which could be arranged more quickly. He went on to point out that one idea that has been suggested is to build a light, one-track railroad from Seattle, Wash., to Alaska. This, he declared would be easier to keep open during the winter months. Other ideas under consideration he told correspondents were to use sea transportation up the inside passage to Alaska, and to create a fleet of transport and freight airplanes to carry supplies and troops to that territory.

### Pullman Anti-Trust Trial Postponed

Resumption of court sessions in connection with the federal government's anti-trust suit against Pullman, Inc., and its car-building and car-operating subsidiaries, which was originally scheduled for March 2, was postponed to June 1 by direction of the special three-man Federal court at Philadelphia, Pa., hearing the case on February 17. The deferment was granted in response to an appeal by counsel for Pullman asserting that officers of the Pullman companies are at present too busy with war manufacturing orders and increased military railroad traffic to prepare a proper defense and that time taken to testify in court would endanger the efficiency of essential duties. Counsel for the United States Attorney General declared that he was reluctant to do anything that might hamper defense work.

### Nebraska Fights Abandonment of 102-Mile Line

The Nebraska State Railway Commission has given formal authority to the state attorney general to begin court action to prevent the Chicago & North Western from proceeding to abandon its 102-mile line between Hastings, Neb., and Linwood. Permission has been given by the Interstate Commerce Commission to the railroad to abandon service on February 20 and immediate action to prevent this will be begun by Assistant Attorney General H. Emerson Kokjer. Although a recent plea by the state for a reconsideration of the I. C. C. approval of abandonment had been denied, the I. C. C. continued the effective date of the abandonment order from February 10 to February 20, allowing Mr. Kokjer time to ask the Federal District Court of Illinois, which

holds jurisdiction over the railroad, to restrain operation of the I. C. C. approval order, on the ground that Nebraska has been denied "due process of law," and that conditions along the line in question now are greatly different from what they were when the case was submitted to the I. C. C.

### Illinois Commission Suspends Commutation Rate Increases

On February 18 the Illinois Commerce Commission suspended for four months, the commutation rate schedules of 14 Illinois railroads which had asked to increase such rates by 10 per cent on March 8 and announced that the Commission will hold separate hearings on each application. The Commission had previously refused the request of the roads for a preliminary hearing in order that the increases could have been placed in effect prior to March 8.

### 12,000 Express Drivers to Receive Honors for Accident Records

Twelve thousand vehicle employees of the Railway Express Agency operated without a single accident for which they were responsible, during 1941, and will receive safe-driving merit cards for their excellent records. At least 3,000 of these operators have maintained perfect no-accident records since the Agency inaugurated its safety plan in 1935, while many of them have yet to have mishaps charged against them since accident statistics were first inaugurated in the express service, on a national scope, in 1918.

The merit cards are awarded for each year of no-accident driving, with those for five, six and seven year records bearing the personal signature of President L. O. Head. Presentations will be made in the cities and towns where the winning drivers are employed. At many such functions, the mayor, chief of the traffic police or head of the local safety council officiates.

### New England Steamship Company Gets "Grandfather" Certificate

The Interstate Commerce Commission, Division 4, has found that the New England Steamship Company, affiliate of the New York, New Haven & Hartford, qualifies under the "grandfather" clause of Part III of the Interstate Commerce Act for a certificate covering steamship operations between the ports of New Bedford, Mass., Woods Hole, Oak Bluffs, Vineyard Haven and Nantucket. The commission denied that portion of New England's application which sought authority to engage in the transportation of passengers on special excursions and chartered trips from Providence, R. I., New York, and New Bedford, Mass.

In the latter connection the commission noted that the applicant had not operated special excursions in interstate or foreign commerce since 1936. Since that year, only four such trips were made in intrastate commerce, between points in Massachusetts. Yet New England contended that it was entitled to authority to perform the special-excursion service—"because it has always held itself open to engage in such operations, but has not received any request for the service." In the opinion of the com-



mission, however, the applicant's special-excursion operations were "too remote to be considered as part of a service which it was performing on January 1, 1940 [the "grandfather" date], particularly in view of the fact that its abandonment of regular service to and from New York in 1937 shows that at about this time it was materially restricting the scope of its operations."

### Canadian Traffic League Elects Officers

Some 400 traffic, transportation and business executives attended the 26th annual meeting of the Canadian Industrial Traffic League in Montreal, Que., on February 3 and 4. The League adopted a resolution to the effect that the users of transportation services should be given opportunity to present their views on any proposals involving changes in freight rates or regulations before such revisions are actually authorized by the Board of Transport Commissioners and the Wartime Prices & Trade Board. The resolution was prompted by Order No. 92 issued by the latter board effective January 26 which appeared to weaken the protection offered shippers under orders-in-council. New officers elected at the meeting were: President J. Redmond, Frost Steel & Wire Co., Hamilton, Ont.; Vice-President, W. Ferguson, Colgate-Palmolive-Peet Company, Toronto, Ont., and Treasurer, H. W. Blahout, Dunlop Tire & Rubber Goods Company.

### Southwest Shippers Advisory Board Meets at New Orleans, March 6

"Keeping the Cars Moving" will be the keynote of the 59th regular meeting of the Southwest Shippers Advisory Board at the Jung Hotel in New Orleans on Friday, March 6. The principal speaker will be Robert S. Henry, of Washington, D. C., assistant to the president of the Association of American Railroads who will address a luncheon sponsored jointly by the Shippers Advisory Board and the Traffic Club of New Orleans. Features of the morning business session will include a talk on the national transportation situation by L. M. Betts manager of the Car Service Division of the A. A. R. and a discussion of such subjects as the effect of recent orders of the Interstate Commerce Commission, various measures to increase car efficiency and plans for the perfect shipping campaign in April. On the day preceding the meeting, the board's executive, railroad contact and joint loss and damage prevention committees will convene at the same hotel.

### Allied Van Lines Proposes Big Pool of Household Goods Carriers

Allied Van Lines, Inc., has applied to the Interstate Commerce Commission for approval of a plan for the pooling and division of traffic and earnings of some 335 carriers of household goods operating throughout the country. The pooled business would be operated by Allied in its own name as a common carrier by motor vehicle; and contracts with the pooling carriers would run for 25 years with provision for withdrawal or expulsion upon 90-days notice.

Allied has heretofore been an organization maintained by members of the National Furniture Warehousemen's Association for the purpose of co-ordinating the operations of local haulers into a long-distance service for moving household goods. The proposed pool, the application asserted, would unify many local and regional facilities into a single system; provide speedier and more flexible service; reduce empty mileage and accounting, billing and solicitation expenses; and effect savings in the cost of providing the service of moving household goods.

### Eastman Warns of Local Transport Shortages

Street car and bus lines and other local transportation services will be called upon this year to carry the heaviest loads in history, and many cities face acute transportation shortages, Joseph B. Eastman, director of defense transportation, declared in a statement issue on February 17.

Mr. Eastman went on to say that to prevent interference with war production, local communities must take immediate action to assure that equipment and manpower in the transit industry are used at maximum efficiency. The total volume of local passenger traffic on public carriers in 1942, he continued, is likely to increase at least 20 per cent over 1941 as a result of increased employment, construction of new industrial plants in outlying areas, stoppage of private automobile production, restriction of private purchases of tires, and other factors.

As a means of making the greatest use of existing facilities, Mr. Eastman suggested (1) staggering business, school, and working hours, (2) improving regulation of street traffic to make possible speedier movement of passenger vehicles, and (3) making more efficient use of private automobiles through doubling up.

### U. P. Defense Bond Drive

As the result of a drive to encourage Union Pacific employees to buy defense bonds, President W. M. Jeffers, has announced that 31,709 of the company's employees, or 86.5 per cent, have either subscribed to monthly payroll deductions or are purchasing bonds with cash and that deduction and cash purchases for the year will far exceed \$7,000,000. Although the Union Pacific had instituted the monthly payroll deduction plan last July, no campaign to encourage the purchase of bonds was begun until January 1. When the drive was closed on January 31, the monthly deduction purchases totaled nearly \$303,000 and cash purchases were close to \$2,290,000, with 74 per cent of the employees taking advantage of the deduction plan.

The Los Angeles division led the percentage column with 99.8 per cent, all except 5, of the employees buying defense bonds. The Colorado division was second with 92.3 per cent and the Nebraska division third with 88.6 per cent. The Wyoming division, however, topped the monthly deduction column with a figure of more than \$49,000 and was also second in the cash purchases column with more than \$250,000. The Oregon division led

in cash purchases with \$263,725. Second in the monthly deduction column was the Idaho division with more than \$36,000, with the Nebraska division placing third in both the deduction and cash purchase columns with \$33,318 and \$248,000, respectively.

### Freight Car Loading

Loading of revenue freight for the week ended February 14 totaled 782,699 cars, the Association of American Railroads announced on February 19. This was a decrease of 1,361 cars, or 0.2 of one per cent, below the preceding week, but an increase of 61,523 cars, or 8.5 per cent, above the corresponding week in 1941, and an increase of 174,462 cars, or 28.7 per cent, above the same week in 1940.

As reported in last week's issue, loadings of revenue freight for the week ended February 7 totaled 784,060 cars, and the summary for that week compiled by the Car Service Division, A. A. R., follows:

#### Revenue Freight Car Loading

For Week Ended Saturday, February 7			
District	1942	1941	1940
Eastern .....	165,685	159,898	139,837
Allegheny .....	172,770	159,330	132,606
Pocahontas .....	47,702	48,415	47,353
Southern .....	124,863	109,688	96,839
Northwestern .....	94,690	80,565	72,179
Central Western .....	116,323	101,665	92,534
Southwestern ..	62,027	50,635	46,081
Total Western Districts ....	784,060	710,096	627,429
Commodities			
Grain and grain products ....	41,315	28,730	29,174
Live stock ....	10,414	10,290	10,540
Coal .....	153,047	149,394	146,545
Coke .....	14,068	14,373	10,971
Forest Products .....	47,146	38,512	29,263
Ore .....	13,405	12,818	9,812
Merchandise l.c.l. ....	151,718	153,324	147,442
Miscellaneous ..	352,947	302,755	243,682
February 7 ....	784,060	710,196	627,429
January 31 ....	815,567	714,354	657,830
January 24 ....	817,804	710,752	650,187
January 17 ....	811,196	703,497	646,382
January 10 ....	737,172	711,635	668,241

Cumulative Total,  
6 Weeks .... 4,642,333 4,164,605 3,842,994

**In Canada.**—Carloadings for the week ended February 7 totaled 62,235, compared to 62,331 in the previous week and 52,587 in the corresponding week in 1941, according to the weekly statement of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
Feb. 7, 1942 .....	62,235	32,404
Jan. 31, 1942 .....	62,331	34,637
Jan. 24, 1942 .....	64,992	34,090
Feb. 8, 1941 .....	52,587	28,617
Cumulative Totals for Canada:		
Feb. 7, 1942 .....	358,801	183,326
Feb. 8, 1941 .....	304,435	162,125
Feb. 10, 1940 .....	285,267	143,902

### 40-Cent Minimum for Interstate Trucking

A wage order requiring payment of at least 40 cents an hour in the Property Motor Carrier Industry, effective March 16, has been issued by Thomas W. Holland, administrator of the Wage and Hour Division, United States Department of Labor. The 40 cents-an-hour minimum was recommended by a committee, comprised equally of representatives of the "public", employers, and employees under the chairmanship of George E. Osborne of Leland Stanford University, which investi-

gated the economic structure of the industry.

Application of the 40-cent minimum wage to the industry will increase the hourly wage rates of more than 70,000 persons employed by about 40,000 truck operators, it was pointed out. The industry employs some 600,000 altogether. Testimony before the Property Motor Carrier Industry Committee showed that few "over-the-road" employees will be affected by the minimum. Most of those currently earning less than 40 cents an hour are terminal employees, loaders and clerical workers. Employees whose wages will be materially increased are located chiefly in the south.

The Administrator issued his decision based upon the record of the public hearing held in Washington from December 1 through December 5, 1941.

### November Bus Revenues 36.8 Per Cent Above 1940

Class I motor carriers of passengers reported November, 1941, revenues of \$12,930,997 as compared with \$9,453,791 in November, 1940, an increase of 36.8 per cent, according to the latest compilation prepared by the Interstate Commerce Commission's Bureau of Statistics from 145 re-

contempt proceedings if service was not resumed. O. F. Carpenter, a representative of the National Mediation Board arrived in Chicago on February 16 to arrange an election on the North Shore, ordered by the board to determine, in accordance with the Railway Labor Act, which unions should represent the workers on that road.

### Some Truckers Refuse Undesirable Cargo

Certain motor common carriers in the East are refusing to accept shipments of which the density, or size in relation to its rate, makes it undesirable cargo, a number of shippers report. That the over-the-road trucking industry itself is alarmed at this inequitable practice by certain of its members is evidenced by a letter that Dabney T. Waring, general manager, Middle Atlantic Motor Carriers Conference, recently sent to members of the Conference. The letter reads in part, "There has been severe criticism directly from one of the Interstate Commerce Commissioners of the failure of common carriers by motor vehicle to fulfill the obligation to the public under their certificates, in that they fail, for one excuse or another, to accept and transport shipments deemed to be un-

The Hotel and Restaurant Employees' International Alliance has been chosen as the representative of the dining car chefs, cooks, waiters, pantrymen, waiters-in-charge and bartenders on the Atlantic Coast Line.

In another case the machinists, boiler-makers, sheet metal workers, electrical workers, carmen, their helpers and apprentices, and the power house employees and railway shop laborers on the Newburgh & South Shore have chosen the Railway Employees' Department, A. F. of L. as their representative.

On the Akron, Canton & Youngstown the board has certified the Order of Railroad Telegraphers as the bargaining agent for the station, town and telegraph employees.

### Approves Rates Embodying Incentive for Heavy Loading

Schedules which provide "progressive reductions in the average rate as the weight loaded approaches the heaviest practical car loading" have been approved by the Interstate Commerce Commission, Division 2, for application on paints in carloads between Illinois territory and Southern territory and between points in Southern territory. The decision is in I. & S. No. 4964.

Primarily, the schedules effect a reduction in the carload minimum weight from 36,000 lb. to 20,000 lb. But they are also designed to encourage loading in excess of the minimum by the reduction in the rate from 40 per cent to 32 per cent of first class on that portion of each carload shipment in excess of 20,000 lb. The plan had its inception in the desire to meet truck competition; but the railroads, as the I. C. C. report points out, believe that the underlying principle "is constructive in that it will permit a quantity of paint approximating a full truckload to be shipped at a reasonable and adequate charge, and at the same time will provide a substantial incentive to shippers to load cars to capacity whenever possible."

For its own part, the commission was "convinced that the proposed rates, which represent reductions only on weight in excess of the minimum weight, are fully compensatory, and that the reduction in the minimum, coupled with the proposed basis of rates, is consistent with the needs of shippers, and, in the light of competitive conditions, with the economical use of the type of equipment available to respondents for handling this traffic."

### Club Meetings

The Indianapolis Car Inspection Association will hold its next meeting on March 2 at the Hotel Severin, Indianapolis, Ind., at 7 p. m.

The Railway Club of Pittsburgh will hold its next meeting on February 26, at the Fort Pitt hotel, Pittsburgh, Pa., at 8 p. m. J. E. Thornton, special agent in charge of the Pittsburgh Field Office, Federal Bureau of Investigation, United States Department of Justice will present a paper entitled, "F. B. I. National Defense Work." The address will be supplemented by sound moving pictures.

The Car Foremen's Association of Omaha, Council Bluffs and South Omaha

	Passenger revenue		Passengers carried	
	November 1941	November 1940	November 1941	November 1940
New England Region .....	\$520,234	\$419,250	1,248,393	983,041
Middle Atlantic Region .....	1,485,024	1,230,294	3,145,868	2,513,173
Central Region .....	2,149,819	1,632,971	3,412,708	2,695,796
Southern Region .....	3,432,280	2,387,053	4,352,255	3,107,446
Northwestern Region .....	432,581	355,428	356,512	314,587
Mid Western Region .....	1,066,061	749,838	806,181	586,297
Southwestern Region .....	1,905,596	1,258,857	2,296,414	1,475,728
Rocky Mountain Region .....	116,157	97,312	88,675	77,086
Pacific Region .....	1,823,245	1,322,788	2,335,680	1,666,359

ports representing 146 bus operators. Passengers carried increased 34.4 per cent, from 13,419,513 to 18,042,686.

The breakdown by regions of the bus revenue and traffic figures, which exclude data on charter or special party service, is given in the accompanying table.

### Compromise Agreement Restores Service on North Shore

Through service on the Chicago, North Shore & Milwaukee into Chicago over the tracks of the Chicago Rapid Transit Company, which had been discontinued since February 1, was resumed on February 18 as the result of a compromise agreement by which crews of the Amalgamated Association of Street, Electric Railway and Motor Coach Employees, will operate the trains of the North Shore over the Elevated lines. As reported in the *Railway Age* of February 7, the refusal of the Elevated lines workers to switch the trains of the North Shore on to the Elevated lines was the result of wrangling between the unions, in which the Amalgamated claimed that its North Shore membership was being raided by the Brotherhood of Railroad Trainmen and the Brotherhood of Locomotive Firemen and Enginemen. The compromise agreement was brought about largely through the efforts of Judge Michael L. Igoe of the United States District Court, who has receivership jurisdiction over both roads, and who threatened

practicable, especially small shipments. To what extent there are grounds for criticism I do not know, but if it is generally true that common carriers are guilty it is a severe indictment of the industry.

"Your obligation to accept and transport all freight offered within the scope of your operating rights is clear, and not only will your failure to do so injure the standing of the industry generally, but might result in the revocation of your certificates. Hundreds of thousands of dollars are being spent annually to build up respect and remove prejudices against the trucking industry and practices of the kind referred to would do much to nullify these efforts."

### Representation of Employees

Results of several recent elections in representation-of-employees cases have been announced by the National Mediation Board.

On the Illinois Central and its subsidiaries, the Yazoo & Mississippi Valley and the Gulf & Ship Island, the National Council of Railway Patrolmen's Unions, A. F. of L. lost an election to determine who should represent the patrolmen (including extra patrolmen, special patrolmen and special officers) for the purpose of the Railway Labor Act. On the three roads the A. F. of L. union received a total of 123 votes as against 174 votes for one Frank P. Kennedy who was certified as the employees' representative.



Interchange will hold its next meeting on March 12 at 1:45 p. m. at the Burlington station, Omaha, Nebr.

The new officers of the Traffic Club of Philadelphia, Pa., will be inaugurated at a dinner at the Benjamin Franklin hotel on Monday, March 9, starting 6:30 p. m.

The Car Foremen's Association of Chicago will hold its next meeting on March 9 at the Hotel La Salle, Chicago, at 8 p. m. F. E. Cheshire, assistant superintendent, car department, Missouri Pacific, St. Louis, Mo., will present a paper on "The Modern Freight Car."

The Eastern Association of Car Service Officers has decided to cancel its annual meeting, which was scheduled for March 26.

The Northwest Car Men's Association will hold its next meeting on March 2, at the Midway Club rooms, St. Paul, Minn., at 8 p. m. F. E. Cheshire will present a paper entitled, "Car Maintenance in Wartime."

## How to Stave Off Anti-Trust Suits

(Continued from Page 420)

this office, you called attention in your letter of January 24, 1942, to the letter of then Attorney General Robert H. Jackson to Mr. John Lord O'Brian, general counsel, Office of Production Management, dated April 29, 1941. The policy suggested in the latter communication may be suitable to many of the larger projects which we may undertake, yet I foresee many other situations in which some measure of discretion must be left to the carriers as to how they shall carry out our instructions, and in which an individual approval by us of each such act might be unduly burdensome if not entirely impossible. Consequently, I hope that your approval will be as broad as you can make it, consistent with your responsibilities under the antitrust laws, and that you can find it possible to extend it to all conduct of carriers which is reasonably necessary to comply with our requests and directives or to further a cooperative effort which we have approved.

I have selected Mr. Jack Garrett Scott, former chief attorney of the Bureau of Motor Carriers, Interstate Commerce Commission, to be general counsel for the Office of Defense Transportation. If satisfactory to you, I shall rely upon him to work out with your representatives a liaison arrangement with your office, and to participate in our behalf in the effectuation of whatever policy in the premises you may wish us to pursue.

In the latter connection Attorney General Biddle's reply stated that the Assistant Attorney General in charge of the Anti-trust Division (Thurman Arnold) would establish liaison with ODT and work with Mr. Scott "in effectuating the policy of this Department." The Attorney General added that "such informal liaison will insure prompt handling of the emergency situations to which you refer." Then came the restatement of the Department of Justice's policy "with particular reference to the transportation industry." It is as follows:

The maximum utilization of the domestic transportation facilities of the nation in the prosecution of the war will doubtless require cooperative or joint effort among carriers involving services, routing, diversions, embargoes, and the like. Some of these acts if accomplished by private contract or arrangement between carriers would probably constitute violations of the antitrust laws. On the other hand, such acts performed by carriers under the direction of public authority during the present emergency, and designed to promote the public interest and not to achieve private ends, do not constitute violations of the antitrust laws.

Meetings of carriers with the Office of Defense Transportation or their representatives are not illegal. Transportation committees may be formed at the request of the Office of Defense Transportation to study and develop plans for the coordination and most effective use of existing domestic transportation facilities for the prosecution of the war. I cannot at the present time foresee any objection to designation of existing carrier associations for these purposes by the Office of

Defense Transportation in view of your statement that national and regional associations already established by the carriers of various types are contributing to the successful performance of currently abnormal transportation burdens. There will be nothing unlawful in the industry co-operating in the selection of its representatives or in selecting members for committees, or in the activities of such committees, or in the activities of designated carrier associations, provided they are kept within the scope of this letter.

Questions as to whether there is need for such committees or for the utilization of the services and facilities of existing carrier associations, and if so, how they shall be chosen, constituted or designated, shall be the sole responsibility of the Office of Defense Transportation. This Department will not participate in these decisions beyond the suggestion now made that any such committees or associations should be generally representative of the type of transportation involved and satisfactory to the Office of Defense Transportation.

Transportation committees or associations shall confine themselves to collecting and analyzing information, studying and developing plans for the coordination and most effective use of existing domestic transportation facilities for the prosecution of the war and making recommendations thereon to the Office of Defense Transportation. They shall not undertake to determine policies in regard thereto for the transportation industry, nor shall they attempt to compel or to coerce anyone to comply with any request or order made by public authority. All requests for action on the part of carriers shall be made by the Office of Defense Transportation and not by a transportation committee or association. That is to say, the function of determining what steps shall be taken in the public interest should in each case be exercised by the public authority which may seek the individual or collective advice of the carriers or their representatives. But the determination should not be made by the carriers themselves or by their representatives, committees or associations.

Requests for cooperative or joint action in the transportation field shall be made only after the general character of the action has been made and cleared by the Department of Justice. If the general plan is approved, thereafter each request for specific action in carrying out such plan shall be made in writing and shall be approved by the office of the General Counsel of the Office of Defense Transportation, but need not be submitted to the Department of Justice. In the case of any change in the personnel of such offices or if serious practical difficulties arise, this latter arrangement may be revoked upon notice from me.

Acts done in compliance with the specific requests or directives made by the Office of Defense Transportation and approved by its General Counsel in accordance with the procedure described in this letter will not be viewed by the Department of Justice as constituting a violation of the antitrust laws and no prosecutions will be instituted for acts performed in good faith and within the fair intent of instructions given by the Office of Defense Transportation pursuant to this procedure.

In the case of all plans or procedure, however, the Department reserves complete freedom to institute civil actions to enjoin the continuing of acts or practices found not to be in the public interest and persisted in after notice to desist.

Undoubtedly need will arise for the exercise of some measure of discretion by the carriers to comply with and carry out your orders and directives or to further a cooperative effort that you may approve. While it is, of course, impossible to anticipate all plans involving the exercise of discretion by carriers which the Office of Defense Transportation may desire to undertake in the future, you may be assured that the policy stated in this letter does not preclude approval by the Department of such plans in appropriate cases.

## Cites Need for Temporary Warehouses

Construction of temporary warehouses may be necessary to provide storage space for lend-lease materials coming off the production lines for which shipping space is not immediately available, members of the American Warehousemen's Association were told this week at their convention at French Lick, Ind., by Samuel G. Spear, chief of the Merchandise Warehouse Section, Division of Storage, Office of Defense Transportation.

"The most immediate and pressing problem," declared Mr. Spear, "is to find out the storage requirements of the lend-lease program. If ships were going to be available to take our goods as fast as they are produced all we would need would be the system of holding and reconsignment de-

pots now being constructed or planned."

"But it is very evident that the production of much material will soon exceed the ship space immediately available and storage space will be required in the production areas. The producing factories cannot hold it. The ports must not be blockaded. It must not be loaded in cars unless there is a place to unload it promptly. Public warehouse space may be insufficient or not of the right character. A place must be ready to store this material. It was on account of the importance of this phase of transportation that Col. Leon M. Micholson was appointed to head the division of storage. It will be his responsibility to plan for sufficient storage space, either by use of existing facilities, if necessary, by new temporary construction."

Specifically, Mr. Spear urged the release of railroad and truck equipment by prompt loading and unloading of cars and trucks. "The transportation systems," he concluded, "are going to be strained to the utmost. If industries such as yours do a good job in releasing equipment even if it costs something for overtime, it may prevent the necessity of imposing drastic demurrage penalties which might be far more costly to you in the end."

## T. P. & W. Strike Continues Dispute Certified to War Labor Board

Papers certifying the strike dispute on the Toledo, Peoria & Western to the War Labor Board at Washington, D. C., were sent to that board on February 16 by the United States Department of Labor. The War Labor Board is expected to meet to decide whether the railroad strike is in its jurisdiction. This depends upon its interpretation as to whether the operation of the road is essential to the defense effort. As reported in the *Railway Age* of February 14, Joseph B. Eastman, director of the Office of Defense Transportation, in a letter to John R. Steelman, director of conciliation in the conciliation service of the Department of Labor, said that he could not certify the road as essential to the defense effort but suggested that WLB might take the case up on its own initiative.

George P. McNear, Jr., president of the T. P. & W. takes the stand that there should be no government interference because the railroad is continuing to operate and therefore is not hindering the war effort. President D. B. Robertson of the Brotherhood of Locomotive Firemen and President A. F. Whitney, president of the Brotherhood of Railroad Trainmen, on the other hand, have warned that failure or inability of WLB to take jurisdiction, might be taken as a precedent for guidance in other disputes on the railroads and declared that the government would "have to accept responsibility for the results."

In the meantime, additional violence occurred on February 12, when half-a-dozen shots from a shot gun were fired at the crew members of a train. One of the shots struck the window of a pusher engine, injuring the fireman slightly. A striking engineman was arrested for the attack and faces contempt citations for violating a "no violence" injunction of the Federal court at Peoria. On February 18, Mr. McNear and three other of-

ficers of the T. P. & W. pleaded not guilty in the U. S. District court to charges of violations of the Railway Labor Act brought by the unions some time ago in a criminal action.

### Compares Plane and Rail—Ignores Latter's Standby Service

Elmer Wheeler, sales adviser and head of "Testing Selling Institute" of New York, is quoted in "Business Week" for February 7 as contrasting services of railroads and airlines, to the detriment of the former. He says:

"I was on a train the other night. Dinner time came. There was such a crowd of soldier and civilian passengers that they were lined up for two cars waiting to get in the diner. They just stood there trying to keep their feet as the train lurched around curves, getting madder and madder. None of the trainmen going through the line stopped to explain the cause of the annoyance or even to indicate any sympathy.

"Later we were sitting in the club car with highballs beside us. The train hit a sharp curve and I bet every drink in that car was spilled. The railroad men didn't have authority to replace those highballs so the passengers had to order—and pay for—fresh drinks. More resentment against the railroad.

"But get this one: At the last stop, an air-line employee had got aboard with a group of passengers, grounded by bad weather, who were finishing their trip by train. These plane passengers lost their drinks with the rest of us. But instantly the air line man rang for the porter and bought fresh drinks for his group. That registered plenty with the railroad passengers."

[Mr. Wheeler omits to consider the super-service that the railroad was offering and which the airlines never do, namely, that of maintaining stand-by facilities to accommodate the passengers of their rivals when the latter "do not choose to run." What other transportation agency affords such a generous alternative to customers who never patronize its own services when they can avoid it? But perhaps the fact that Mr. Wheeler bristles at minor annoyances while he shows no appreciation for an offsetting railroad virtue of great and costly magnitude, does suggest a poor job of selling rail service.—EDITOR].

### New Plan Outlined for Steel Plates

A comprehensive plan for control over production, consumption and allocation of steel plates was outlined on February 16, at a meeting of plate producers by C. E. Adams, chief of the iron and steel branch of the division of materials, War Production Board.

The stated purpose of the new set-up is to insure fulfillment of all military requirements, particularly those of the Navy and the Maritime Commission for ship plates. The ship program, plus necessary requirements for the Army, the construction of new war plants, the railroads and other heavy industry, leave no leeway in plate production, it was said. The WPB announcement also declared that the de-

livery of ship plate has lagged at times in recent months despite an increase in the overall plate production.

Under the new regulations, two forms must be filed monthly by consumers. Form PD-298 lists in detail requirements for the following month and the uses to which plates are to be put. Two copies are to be filed with the producer and one with the War Production Board, at least a month in advance. Form PD-299 must be filed by the seventh of the month and lists consumption, inventories and receipts for the month and estimated requirements for the two months following. Also, producers will report to the WPB daily, weekly, and monthly by wire as to shipments of plates, and monthly on schedules for the month following.

Only orders for plates carrying a preference rating of A-10 or higher, or those specifically allocated by the director of industry operations, may be requested, scheduled or delivered.

The announcement also notes that steel plate shipments in January were the highest in the nation's history, due largely to the conversion of strip and sheet mills to plate production. Shipments totaled 754,522 tons, as compared to 635,812 for December, 1941, the previous record.

Meanwhile, supplementary order M-1-f, which brings into one order complete allocation control over aluminum, has been issued by J. S. Knowlson, director of industry operations. It replaces orders M-1 and M-1-a. The order, according to the WPB announcement, leaves the allocation control over aluminum in substantially the form in which it now is being administered.

### Railroad Industry Starts Off C. of C. Radio Series

Performance of the railroads in moving troops since the Pearl Harbor raid features the initial program in a series of 15-min. recordings for broadcasting over 100 local radio stations recently released by the United States Chamber of Commerce under the title "Action on the Home Front! The Story of Business of War!" The railroad program takes the form of an interview of W. C. Kendall, chairman, Car Service Division, Association of American Railroads by Hardy Burt, radio director of the national chamber.

The latter opens the program with the comment that America's railroads—privately-owned and operated—"must be credited with accomplishing the most remarkable feat in all transportation history" in moving two-thirds of a million troops—artillery, tanks, trucks and all—in a few weeks to the places where war needed them. Asked whether Hitler ever carried out a mass-transport operation comparable to that achieved by United States railroads, Mr. Kendall answers: "My surmise is that he possibly has carried out a transport operation on a scale equal to ours. But—and this is the point—he couldn't do it without virtually stopping all civilian use of railroads." Mr. Kendall points out that during the time the soldiers were being moved, no major stoppages of civilian railroad traffic occurred, although civilian passenger travel was up 30 per cent because of the Christmas season.

"Moving the men themselves wasn't such a tough job," he says. "It was the equipment that presented the real difficulties. On some trains there were three or four freight cars for each passenger car. All of the men travelled in passenger cars. As a matter of fact, three-quarters of them were even provided sleeping accommodations in Pullman cars." Each train carried a completely equipped fighting unit, he points out, that could have gone immediately into battle action upon reaching its destination if necessary.

Mr. Kendall also reviews the fact that the weather in the West was very unfavorable during the troop movement—a fact not transmitted by the newspapers on a national scale. "Temperatures dropped away below zero. Snow fell as if the sky had frozen and cracked open. Railroad men had to work long and hard hours in raging, freezing weather in many localities. The maintenance men, dispatchers, conductors, locomotive engineers, and thousands of other railroad employees who made the mass-movement of troops possible performed a service for their country that will live long in railroad annals."

### Eastman Wants Voluntary Rail-Truck Co-operation

Joseph B. Eastman, director, Office of Defense Transportation, told the New England Shippers Advisory Board in Boston, Mass., on February 12, that one good result of the rubber shortage will be to give a practical demonstration to the railroads of the importance of motor vehicles to them. The defense chief reiterated the warning he has enunciated in previous speeches reported in the *Railway Age* that transportation is the very foundation of the industrial mechanism of the country and must be accorded more materials and equipment by priority authorities if it is to continue to handle the demands of an increasing traffic. The speaker also again commended the advisory boards for their aid in keeping the car supply liquid.

Expanding on his point that the railroads and the truck are complementary, Mr. Eastman declared, "The fact is that in many large railroad systems motor vehicles are used so extensively in terminal and other auxiliary operations, and the rail operations are so geared to these uses, that service would suffer disastrously if the motor vehicles were lost. Another fact is that the motor carriers are handling a volume of merchandise traffic so large that, with their present equipment, the less-than-carload operations of the railroads would be swamped if they had to carry this volume. It is equally true that the passenger operations of the railroads would be swamped, if they now had thrust upon them the traffic handled by buses, to say nothing of the private automobile.

"Having all this in mind, a member of my staff, who came from the railroads has this to say: 'Some real results can be secured in each locality by joint rail and truck—I hesitate to use the word—co-ordination. In our war effort we are striving for maximum effective haulage and freedom of flow of an unprecedented amount of tonnage. Everything is scarce except tonnage; there are plenty of pay-



loads, if the transportation industry learns to co-operate thoroughly and change methods adapted to the era when a carload or truckload of freight was worth a special report to the boss. I'd like to think that voluntary local co-operation between the railroads and truckers would take place—now!"

The defense chief called upon the railroads to do an improved job in utilizing their facilities. Among the suggestions which he offered were an increase in the average loading of less-carload shipments; co-operation with shippers in eliminating "week-end blackouts of production in our industries;" an increase in the speed of line-haul movement, and a cut in the minimum time between train terminal and siding, the time awaiting loads, and empty cross-haul mileage.

### Roosevelt Urges "Pork Barrel" Bill

President Roosevelt last week sent a letter to Representative Mansfield, Democrat of Texas and chairman of the House rivers and harbors committee, urging immediate enactment of H. R. 5993, the billion-dollar omnibus rivers and harbors bill which is now pending on the House calendar. It was also learned this week that the bill will probably be brought up in the House sometime early in March. It is not known what deletions, if any, will be made in the bill on the floor, but the committee has already agreed to an amendment which provides that "no projects herein authorized shall be appropriated for or constructed until six months after the termination of the present war in which the United States is now engaged unless the construction of such projects has been recommended by an authorized defense agency and approved by the President as being necessary or desirable in the interests of national defense and security, and the President has notified the Congress to that effect."

"I invite your attention to the need for expediting legislative action on bill H. R. 5993," wrote the President. "At this time it is important that every phase of production contributory to the Nation's armament be prosecuted with the utmost dispatch. Certain waterway improvements for navigation and power production are especially desirable for the transportation and production of war materials."

"The bill in question authorizes improvements in the interest of national security and the stabilization of employment and provides that the projects authorized shall be prosecuted as speedily as may be consistent with budgetary requirements. It is pertinent to point out that the proposed legislation is merely an authorization. It is extremely important however, that authorizing legislation be expedited in order that the appropriation committees of Congress may provide without delay for projects urgently needed on account of the war emergency."

Later, Representative McGregor, Republican of Ohio, placed in the Congressional Record of February 17 an extension of remarks in which he said that, to his mind, the bill should be called the \$3,000,000,000 omnibus rivers and harbors bill. He characterized the measure as "representative of the most undesirable legislative practice," that of lumping together worthy projects with those of "strictly pork barrel nature, the thought being that good projects will tend to overcome opposition to those which are not desirable."

"The truth of the matter is," declared Representative McGregor, "that the supposed ban on nondefense items for the duration of the war is 'more imaginary than real.' The President in his request stresses the point that an authorization is not an appropriation. May I raise this point: Why authorize a project if no appropriation is to follow? Why not separate the good from the evil and let Congress vote on the two items independently? If the St. Lawrence waterway is a worthy project, why not let it muster enough votes on its own merits instead of by 'pork barrel' legislation?"

### Records of Passenger Brokers

The Interstate Commerce Commission, Division 1, has prescribed a rule under section 204 (a) (4) of the Interstate Commerce Act requiring the maintenance of certain records of brokers of passenger transportation subject to section 211 of the act. The report is in the Ex Part No. MC-36 proceeding.

The rule requires passenger brokers to maintain records which shall show: (1) The points of origin and destination for each ticket sold; (2) the name and address of the motor carrier for which it is sold; (3) the amount received from the passenger, including any amounts, stated separately, for the transportation of baggage, or any other service accessorial to the transportation of the passenger; (4) the payments made to each carrier by motor vehicle served by the broker; and (5) the amounts of the commissions earned by the broker from the sale of transportation for each carrier.

### Thompson Tells Congress of Barge Line Operations

Suggestions from certain members of Congress that it might be well for the government-owned Inland Waterways Corporation to abandon some of its operations on unprofitable streams were shied away from recently by Chester C. Thompson, president and chairman of the board of the organization. This was revealed this week when testimony before a House appropriations subcommittee was made public in connection with the passage by the House of an appropriation bill for the Department of Commerce, under whose supervision the corporation operates. The bill carried no money for I. W. C. which receives no appropriation from Congress, but operates on its own funds which it derives from its waterway operations on the Mississippi, Missouri, and Warrior Rivers.

The testimony of Mr. Thompson also showed the corporation's financial picture as of the end of the last calendar year. The statement submitted with his testimony was based on 11 months actual and one month estimated earnings, and revealed total revenues of \$8,295,730 and total expenses, including depreciation, of \$8,527,830, thus giving the corporation an operating deficit of \$232,100 for the year 1941. The

depreciation deduction was \$667,400, so the income before depreciation was \$435,300.

Mr. Thompson began his testimony before the subcommittee by explaining that the corporation was created to develop the waterways and inland rivers, and that Congress declared in the organic act that it should be operated as nearly as possible like a privately owned enterprise. "It has done that, in my opinion, to a very successful degree," declared the I. W. C. executive.

Representative Carter, Republican of California, asked Mr. Thompson whether private waterway operators show a profit. "The private companies," replied Mr. Thompson, "operate in a little different manner than the Inland Waterways Corporation. All of the private operators are complaining, the same as we are here complaining about the unbalanced traffic. The private operators are permitted to go on the Ohio River, while the Inland Waterways Corporation is denied the privilege of operating on that river. I think it is fair to say that the private companies will not make as much profit in 1941 as they did in 1940 because of the unbalanced traffic."

"Do you think they will make some profit?" queried Mr. Carter.

"Yes," replied Mr. Thompson, "I think they will make some profit."

"Did they show a profit in 1940?" continued the Congressman.

"Yes," was Mr. Thompson's answer; "They did, generally speaking."

The Californian then wanted to know whether the government could not operate as economically and as skillfully as private companies. Mr. Thompson said that it could not because of certain limitations and because of the necessity of operating on unprofitable routes. After Mr. Thompson had declared that the limitations could be removed by an act of Congress, Mr. Carter asked if he recommended such action.

"I do not believe I would under present circumstances," the witness answered, "because of the value of a potential service in the current war and the national defense program."

"But other than that," interposed Mr. Carter, "you would recommend that some of those limitations be removed and that you be given greater freedom of movement to transport freight that would produce a profit rather than a deficit?"

"One must approach that from two different angles," replied Mr. Thompson. "One is the angle of the benefit to a community served by the Inland Waterways Corporation; and the other is from the angle of a cold-blooded business proposition."

"But when you have cold-blooded business competition you have to consider that," admonished Representative Rabaut, Democrat of Michigan. Later, Mr. Rabaut expressed the opinion that the corporation's funds should be appropriated by the Congress rather than permitting it to live off its own revenues. Mr. Thompson informed him that the Bureau of the Budget is giving consideration to some recommendations concerning more definite control of government-owned corporations.

## Supply Trade

### Baldwin Locomotive Works Annual Report

The Baldwin Locomotive Works and subsidiaries, including the Midvale Company, reported a consolidated net profit of \$3,975,499 in 1941, as compared with \$1,944,073 in 1940. After deducting preferred stock dividends of \$163,029, the balance was equivalent to \$3.70 per share of common stock, as compared with \$1.75 in 1940. Baldwin's share in the earnings of Midvale amounted to \$2,462,085 in 1941, as compared with \$1,984,750 in 1940. Provision for income and other taxes equalled \$7.55 per share of Baldwin common stock in 1941, as compared with \$3.58 per share in 1940. Significant comparisons of consolidated operating results follow:

	1941	1940
Sales <sup>1</sup> .....	\$104,385,235	\$51,102,729
Cost of sales <sup>2</sup> .....	88,888,026	43,246,859
Operating profit .....	\$15,497,209	\$7,855,870
Other income (dividends, int., etc.) ..	320,744	349,776
Other expenses <sup>3</sup> .....	1,574,139	1,120,550
Provision for federal and Pa. income taxes .....	8,296,200 <sup>4</sup>	3,896,437
Profit for year ....	\$5,947,614	\$3,188,659
Equity of minority stockholders in net profit of the Midvale Co. ....	1,541,965	1,244,586
Baldwin's portion of the reserve for war contingencies provided by the Midvale Co. ....	430,150	.....
Net profit to Baldwin	\$3,975,499	\$1,944,073

<sup>1</sup> Including sales of locomotive products totaling \$26,464,599 in 1941 and \$14,565,851 in 1940.

<sup>2</sup> Including depreciation as follows: 1941—\$1,854,957; 1940—\$1,849,002.

<sup>3</sup> Including interest as follows: 1941—\$554,051; 1940—\$461,807.

<sup>4</sup> Including \$4,680,000 for federal excess profits tax.

#### UNFILLED ORDERS

	December 31, 1941	December 31, 1940
For new locomotives	\$31,029,347	\$10,268,269
For other products, incl. locomotive parts .....	220,949,376	141,106,142
	\$251,978,723	\$151,374,411

Consolidated net current assets amounted to \$22,166,224 on December 31, 1941, of which Midvale accounted for \$11,166,100. As of January 1, 1941, the corresponding totals were \$17,125,293 and \$9,008,796.

In his annual report, Charles E. Brinley, president, stated that in the locomotive and ordnance divisions, during the early part of the year, the company had relatively few steam locomotives to construct, but were called upon to undertake a variety of new work for the army and navy, which included military tanks, anti-aircraft gun mounts, gun barrels, barbettes and other items essential to the war program. After midyear, steam locomotive orders considerably increased but by that time much of the essential material for these locomotives had become very difficult to obtain. Manufacturing operations for a time were, therefore, delayed and locomotive deliveries correspondingly interrupted, though in more recent months this situation has improved and some of the needed material has been acquired.

During 1941 the company received or-

ders for 188 steam locomotives and shipped 67. In the Diesel-electric field orders were received for 112 locomotives versus 71 shipped. Plans for the improvement and expansion of the company's Diesel locomotive program are going forward as rapidly as circumstances permit. The Whitcomb Locomotive Company, wholly-owned subsidiary, has large orders on its books with priorities which, it is believed, will assure an opportunity to complete these orders.

### American Brake Shoe & Foundry Co. Annual Report

Net earnings of the American Brake Shoe & Foundry Co. during the year 1941 amounted to \$3,194,873 which, after preferred dividends, equal \$3.56 per share of common stock. This compares with 1940 earnings of \$2,968,498, or \$3.49 per share. Provision for federal income and excess profits taxes for the year was \$3,300,000, or \$4.29 per common share. Significant comparisons follow:

	1941	1940
Net sales .....	\$50,934,299	\$31,574,162
Cost of sales (incl. research, etc.) ...	44,789,751	27,906,104
Profit from operations	\$6,144,548	\$3,668,058
Other income (dividends, interest, etc.) .....	387,139	383,038
Other charges .....	36,814	232,598
Provision for U. S. income tax .....	3,300,000	850,000
Net Income .....	\$3,194,873	\$2,968,498

Depreciation and amortization deducted in arriving at above net income: 1941—\$1,823,844; 1940—\$1,428,688.

The current assets at the end of the year were \$23,777,913 and current liabilities \$6,200,639, the excess of current assets over current liabilities being \$17,577,274, as compared with \$12,170,847 at the end of 1940. Unfilled orders at the year's end amounted to \$16,500,000 against \$6,400,000 at the beginning of the year.

In his annual report to the stockholders, William B. Given, Jr., president, noted that the procurement of production materials has become progressively harder and that during 1941 shortages at times importantly reduced production at plants of the wheel and track work divisions. Since January 1, 1929, plant expenditures made and authorized for improvements and extensions have amounted to \$8,700,000, with the largest single expansion being in the forging business. Here, in addition to shells, new production includes forgings for airplanes, tanks, jeep cars, torpedo boats, naval gun mounts and machine tools.

Harmon S. Eberhard has been elected a vice-president of the Caterpillar Tractor Company, Peoria, Ill., succeeding Thomas John O'Connor, whose death on January 23 was reported in the *Railway Age* of January 31. C. G. A. Rosen has been appointed director of a newly created research department. G. E. Burks has been promoted to chief engineer.

Arthur T. Cox, Jr., has been elected vice-president of the Lincoln Electric Railway Sales Company, with headquarters at Chicago. Mr. Cox, who was born on May 5, 1911, at Indianapolis, Ind., studied engineering at Cornell and Purdue universities and was graduated from the

latter in 1933. Before his appointment as vice-president of the Lincoln Electric Railway Sales Company at Chicago, Mr. Cox was sales manager of the Bettendorf Company, Bettendorf, Iowa. Prior to that he had been a district sales manager in the industrial sales division of the Lincoln Electric Company, by whom he had been



Arthur T. Cox

employed from September 16, 1936, until May 8, 1939. In his work as vice-president Mr. Cox will be in charge of welder machine and electrode sales as well as engineering service on all railroads in Chicago and territory west of Chicago.

John W. Sheffer, who has been associated with the American Car & Foundry Co. since 1908, has recently been appointed general electrical engineer of that company. Mr. Sheffer graduated from Cornell University in 1907 with a degree in mechanical engineering and later, in 1933, obtained his Master of Arts degree from Columbia University. He began his association with a. c. f. in 1908 at the Berwick, Pa., plant acting first as electrical engineer and later in the capacities



J. W. Sheffer

of assistant to the general superintendent and plant engineer. During these 17 years he was engaged also with welding developments of all description, and was particularly responsible for the development of the Berwick electric rivet heater. In 1926, he was transferred to the New York office and since that time has been occupied with



improvement and development problems in the several plants. Major welding installations have been made at five plants of a. c. f. and its affiliates. Mr. Sheffer holds memberships in the American Institute of Electrical Engineers, American Welding Society, Iron and Steel Engineers and Cornwell Society of Engineers.

**Walter Geist**, vice-president of **Allis-Chalmers Manufacturing Company**, Milwaukee, Wis., has been placed in charge of a centralized sales administrative department, created to co-ordinate the company's sales policies.

**Frank W. Lewis**, formerly chief mechanical engineer of the Bettendorf Company, has become associated with the **Allied Railway Equipment Company** of Chicago, as vice-president in charge of engineering.

**George G. Prest**, who was associated for a number of years with the late **George H. Goodell**, railway equipment manufacturers' agent at St. Paul, Minn., has been appointed representative in Minneapolis and St. Paul for the **Q and C Company**, New York. As reported in the *Railway Age* of February 7, Mr. Prest has also been appointed representative in the Twin Cities for the **National Lock Washer Company**, Newark, N. J.

**A. J. Reading** has entered the service of the **Elastic Rail Spike Corporation**, New York, as assistant sales engineer, and will establish a branch office at 4719 Korte avenue, Dearborn, Mich. Mr. Reading is a graduate civil engineer of Michigan State college and had been employed by the Pere Marquette as an assistant engineer in the maintenance of way and bridge and building departments since March, 1928.

The **Pomona Pump Co.**, Pomona, Cal., has purchased the Westco Pump division of **Micro-Westco, Inc.**, Bettendorf, Iowa. The newly acquired business will be operated as **Pomona Pump Co.**, Westco division, at 2621 Locust street, St. Louis, Mo., and manufacture will be continued from the St. Louis plant of the **Pomona Pump Co.** Management and key personnel of Westco will be transferred to St. Louis to continue the manufacture and distribution of the complete line of Westco pumps.

**Norman C. Naylor**, vice-president of the American Locomotive Company, Chicago, and vice-president of the **Railway Supply Manufacturer's Association**, has been elected president of that association, succeeding Daniel L. Eubank, whose death on November 24 was reported in the *Railway Age* of December 6. **C. W. Floyd Coffin**, vice-president of the Franklin Railway Supply Company, New York, chairman of the Exhibit committee and a member of the Executive committee of the association, has been elected vice-president, relieving Mr. Naylor and **R. P. Townsend**, sales manager of the transportation department, Eastern region, Johns-Manville Sales Corporation, has been elected a member of the Executive committee, replacing Mr. Coffin. **John D.**

**Conway** continues as secretary-treasurer of the association.

## OBITUARY

**Donald G. Sherwin**, a vice-president and director of the Caterpillar Tractor Company, Peoria, Ill., died at his home in San Leandro, Cal., on February 11.

**August Ziesing**, who retired as president of the American Bridge Company in April, 1927, died on February 16 at his home in Glencoe, Ill. Mr. Ziesing was born at Peru, Ind., on February 19, 1858, and graduated from the University of Illinois in 1878. After engaging in bridge construction and structural engineering work for several years, he became a consulting engineer at Chicago, specializing in railway structures. In 1900 he went with the American Bridge Company as vice-president and western manager and in September, 1905, he was elected president.

## Equipment and Supplies

### New York Central Spends \$14,000,000 for New Equipment

The New York Central System has placed orders for approximately \$14,000,000 of new equipment needed to carry the heavy volume of traffic resulting from the war emergency. Purchases comprise 25 heavy freight steam locomotives, 2 Diesel-electric passenger locomotives, 30 Diesel switching locomotives and 2,500 freight cars. Deliveries are expected to begin in August of this year. Orders for the new equipment were placed as follows:

#### LOCOMOTIVES

25—4-8-2 type, heavy freight steam locomotives—Lima Locomotive Works.  
2—4000-hp. Diesel-electric passenger locomotives—Electro-Motive Corporation.  
10—600-hp. Diesel switching locomotives—Electro-Motive Corporation.  
17—660-hp. Diesel switching locomotives—American Locomotive Company.  
3—660-hp. Diesel switching locomotives—Baldwin Locomotive Works.

#### FREIGHT CARS

1,100—40½-ft., 55-ton box cars—Despatch Shops, Inc.  
500—52½-ft., 70-ton gondola cars—Despatch Shops, Inc.  
100—65½-ft., 70-ton gondola cars—Despatch Shops, Inc.  
300—52½-ft., 70-ton flat cars—Despatch Shops, Inc.  
500—55-ton self-clearing hopper cars—Despatch Shops, Inc.

The intended purchase of a large number of steam and Diesel-electric locomotives and freight cars by this railroad was reported in the *Railway Age* of January 10, and the inquiry for the 25 4-8-2 type steam locomotives in the *Railway Age* of January 24.

#### LOCOMOTIVES

The New York, Chicago & St. Louis is inquiring for 15 steam locomotives.

The Northern Pacific has issued inquiries for ten steam locomotives of the 4-8-4 type.

The NASHVILLE, CHATTANOOGA & St. LOUIS has ordered five 1,000 hp. Diesel switching locomotives from the American Locomotive Company.

The St. LOUIS SOUTHWESTERN has placed an order for three Diesel-electric locomotives of 1,000 hp. each with the Baldwin Locomotive Works.

## FREIGHT CARS

### U. P. Inquiring for 2,000 Cars

The Union Pacific has issued inquiries for a total of 2,000 new freight cars, including 1,000 ballast cars of 50 tons' capacity and 1,000 high-side drop-bottom gondola cars of 50 tons' capacity.

### B. & O. Spends \$6,000,000

The Baltimore & Ohio has purchased 2,000 new freight cars at cost of \$6,000,000, including 1,000 50-ton steel hopper cars ordered from the Bethlehem Steel Company and 1,000 50-ton steel box cars ordered from the General American Transportation Corporation. The railroad plans to finance this purchase with an equipment trust. The inquiry for this equipment was reported in the *Railway Age* of January 31.

The NASHVILLE, CHATTANOOGA & St. LOUIS is inquiring for 450 freight cars.

The CHICAGO, INDIANAPOLIS & LOUISVILLE is inquiring for 500 freight cars of various types.

The PITTSBURG & SHAWMUT is reported to be considering the acquisition of new freight cars.

The CHICAGO & NORTH WESTERN has ordered an additional two 50-ton steel box cars from the American Car & Foundry Co.

The UNITED STATES NAVY DEPARTMENT, Bureau of Supplies and Accounts, is asking for bids March 10 on 28 40-ton flat cars and 15 40-ton box cars for delivery to Oakland Cal.

The UNITED STATES WAR DEPARTMENT has placed an order for 200 box cars and 25 combination box and caboose cars with the General American Transportation Corporation.

The CENTRAL OF GEORGIA has ordered 100 50-ton box cars from the American Car & Foundry Co. This railroad is also expected to place orders for an additional 50 50-ton flat cars and 50 50-ton gondola cars.

The UNITED STATES NAVY DEPARTMENT, Bureau of Supplies and Accounts, is asking for bids, February 27, for one motor rail car, five 36-ft. 135-ton armored deck cars, and two 28-ft. 4¾-in. 8-wheel caboose cars for delivery to Dahlgren, Va.—schedule 403.

## PASSENGER CARS

The UNITED STATES NAVY DEPARTMENT, Bureau of Supplies and Accounts, is asking for bids February 27 on one combination passenger and baggage car—schedule 403.

## Construction

**MISSOURI PACIFIC.**—Work has been started on the Gravois Avenue underpass in St. Louis, Mo., and will probably be completed this summer. The G. L. Tarlton Company, Inc., St. Louis, was awarded the contract, amounting to \$279,241. The project consists essentially of depressing the grade of Gravois avenue for a distance of approximately 1,400 ft., providing retaining walls, and two highway spans and a railway span over Gravois avenue. The railway bridge will consist of groups of plate girder spans containing approximately 200 tons of structural steel. The railroad span is flanked on each side by concrete deck girder highway spans.

**PENNSYLVANIA.** — The Pennsylvania Public Utility Commission has approved plans calling for the abolition of the crossing at grade in the city of Erie, Pa., where Elm street crosses one main track and five yard tracks of the Pennsylvania, and the construction, in lieu thereof, of a crossing below the grade of the single main track and two yard tracks about 350 ft. east of the present crossing. Detailed plans of the proposed bridge to carry the tracks above the new highway provide for the construction of a two-span steel and reinforced concrete bridge approximately 75 ft. in length, supported upon reinforced concrete abutments and, at one intermediate point, upon a reinforced concrete pier. The new bridge will be constructed so as to provide a section of highway 24 ft. in width on each side of the center pier. Total cost of the proposed improvement is estimated at \$193,144.

**ST. LOUIS-SAN FRANCISCO.**—The War Department, U. S. Engineer Office, Denison, Tex., has issued an invitation for bids on the relocation of approximately 18 miles of the St. Louis-San Francisco railway line from Liggett, Okla., to Platter and from Lakeside, Okla., to Mead, occasioned by the construction of the Denison dam on the Red river. The principal quantities involved in this work will be approximately as follows: 659,000 cu. yd. of unclassified grading excavation, 1,344,000 cu. yd. of borrow excavation, 72,000 cu. yd. of riprap, 8,200 lin. ft. of piling, 1,500 cu. yd. of concrete, 103 tons of reinforcing steel, 2,444 tons of structural steel, 3,000 lin. ft. of concrete pipe, 1,400 lin. ft. of corrugated metal pipe, 370,000 ft. b. m. of bridge timber and 95,000 lin. ft. of track.

**THE UNITED STATES WAR DEPARTMENT,** engineer office, Denison, Tex., is asking for bids for the relocation of the St. Louis-San Francisco railway line from Liggett to Platter and Lakeside to Meade. The work will include 659,000 cu. yds. grading excavation, unclassified; 1,344,000 cu. yds. borrow excavation; 72,000 cu. yds. riprap; 16,000 cu. yds. gravel cushion; 3,200 cu. yds. foundation excavation; 8,200 lin. ft. piles; 1,500 cu. yds. concrete; 206,000 lb. reinforcing steel; 4,888,000 lb. structural steel; 3,000 lin. ft. concrete pile; 370,000 f. b. m. bridge timber; 95,000 lin. ft. track; 8,800 rods right-of-way fence and 1,400 lin. ft. corrugated metal pipe.

## Financial

**ATCHISON, TOPEKA & SANTA FE.**—*Abandonment by the Oklahoma Central.*—The Oklahoma Central and the Atchison, Topeka & Santa Fe, respectively, have been authorized by Division 4 of the Interstate Commerce Commission to abandon a line and the operation thereof extending from Purcell, Okla., to Chickasha, 41.2 miles.

**BALTIMORE & OHIO.**—*New chairman for B. R. & P.*—Roy B. White, president of the Baltimore & Ohio, was elected chairman of the board of its subsidiary Buffalo, Rochester & Pittsburgh, at a meeting of the board of directors of the latter in Rochester, N. Y., on February 12. Mr. White succeeds Daniel Willard, whom he succeeded as president of the B. & O. last June.

**BOSTON & MAINE.**—*Substitution of Collateral.*—Division 4 of the Interstate Commerce Commission has approved a release by the Reconstruction Finance Corporation of \$221,000 of St. Johnsbury & Lake Champlain first mortgage five per cent bonds, due March 1, 1944, and \$86,000 of Concord & Claremont, N. H., first mortgage five per cent bonds, due January 1, 1944, which are held as collateral for an RFC loan to this company. At the same time the B. & M. was granted authority to deposit with the RFC, in lieu of the bonds to be withdrawn, \$257,000 of Newport & Richford first mortgage sinking fund four per cent bonds, maturing January 1, 1966, together with a cash payment of \$31,580.

The reason given for the withdrawal of the collateral is that the bonds will mature in 1944, and the company is now preparing to take up these bonds so that it will not have to consider them when the issues are refunded.

**CHESAPEAKE & OHIO.**—*Equipment Trust Certificates.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to assume liability for \$5,150,000 of 1¾ per cent equipment trust certificates, maturing in 10 equal annual installments of \$515,000 on February 15 in each of the years from 1943 to 1952, inclusive. The issue has been sold at 99.222 to Halsey, Stuart & Co., Inc., acting on behalf of itself and 11 associates, making

**CHICAGO & EASTERN ILLINOIS.**—*Equipment Trust Certificates and RFC Financing.*—This company has asked the Interstate Commerce Commission to approve a plan whereby it would issue and sell to the Reconstruction Finance Corporation \$1,200,000 of 2½ per cent equipment trust certificates maturing in 30 equal semi-annual installments of \$40,000 beginning May 1, 1942, and continuing each May 1 and November 1, to and including May 1, 1957. The proceeds of the issue will be used as part of the purchase price of new equipment costing a total of \$1,500,000 and consisting of 500 50-ton, 40 ft. 6 in. steel underframe box cars.

**CHICAGO & NORTHWESTERN.**—*Ask Equipment Note Bids.*—Requests for bids for equipment trust certificates aggregating \$3,750,000 have been sent out. The certificates are to cover 75 per cent of the cost of 1,750 units of freight equipment recently ordered, including 1,000 70-ton gondola cars 500 50-ton box cars and 250 50-ton flat cars. Orders for this equipment were reported in the *Railway Age* of January 31.

**CHICAGO & NORTH WESTERN.**—*Equipment Trust Certificates.*—This road has applied to the Interstate Commerce Commission for authority to assume liability for \$3,750,000 of equipment trust certificates. The proceeds would be used to finance 75 per cent of a \$5,079,750 expenditure for the following equipment: 500 50-ton, steel-sheathed, wood-lined box cars; 1,000 70-ton steel gondola cars with wood floors; and 250 50-ton steel flat cars with wood floors. The certificates will bear interest at a rate to be determined from competitive bids; they will be dated March 15, 1942, and will mature in 10 equal annual installments on March 15 of each year from 1943 to 1952, inclusive.

**ILLINOIS CENTRAL-DUBUQUE & SIOUX CITY-CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC.**—*Abandonment.*—Acting on these companies' request, Division 4 of the Interstate Commerce Commission has dismissed without prejudice their application in Finance Docket No. 13512 for authority to abandon a connecting track in Delaware, Iowa.

**MISSOURI PACIFIC.** — *Reorganization Plan.*—The Missouri Pacific railroad company (debtor corporation) announced on February 16 that its private postcard sur-

Name of Issue	Indicated Acceptances	Indicated Rejections	P. C.
			Rejections of Total Returns
MP General 4s 1975 .....	\$439,500	\$16,079,350	97.33
MP Convertible 5½s 1949 .....	762,000	24,858,000	97.02
MP 5½s 1955-56 .....	287,500	5,403,000	94.94
IGN Adjustment 1952 .....	847,000	5,478,000	86.60
MP First & Refunding 5s .....	14,158,000	56,796,000	80.04

the average annual cost to the company approximately 1.9 per cent.

**CHICAGO GREAT WESTERN.**—*Trackage Rights.*—This company has asked the Interstate Commerce Commission for authority to acquire trackage rights over a line of the Chicago & North Western between Dodge Center, Minn., and Rochester, 19.2 miles.

vey of bondholders' sentiment on the pending so-called "Stedman" plan of reorganization for the road indicates an overwhelming majority in favor of rejection of the plan. A summary of returns through February 14 from some 50,000 bondholders is shown in the table.

**MISSOURI PACIFIC.** — *Poll Indicates Bondholders Against Stedman Plan.*—A

Continued on next left-hand page



## THE PROGRESS REPORT OF THE RAILROAD DIVISION OF THE A.S.M.E. FOR 1940-41 STATES:

### "... indicated horsepower of 4267 at 75 mph"

"The disclosure of the results of laboratory and road tests of this locomotive\*, equipped with the Franklin (oscillating-cam poppet-valve) system of steam distribution, is an outstanding event of the current year. In road tests, the locomotive, which has two 27-in. x 28-in. cylinders, 205 psi working pressure, and 80-in. drivers, developed a maximum horsepower of 2980 at 60-65 mph. Compared with the results of the A.A.R. passenger-train tests, previously reported in this series of papers, the gain in drawbar horsepower was 24 per cent at 60 mph, 33 per cent at 70 mph, and 44 per cent at 80 mph. With a 1000-ton train on level track, the poppet-valve engine attained 88 mph, and the original engine 78.5 mph. In general, the road tests showed the capability of the poppet-valve locomotive to meet the fastest schedules on the fast Fort Wayne-Chicago Division with trains of 13 cars. On the test plant, the locomotive developed a maximum indicated horsepower of 4267 at 75 mph and 4100 at 100 mph. With a steam consumption of 70,000 lb, the engine used about one seventh less steam per indicated horsepower at moderate speeds, and the improvement in economy increased to more than 30 per cent at 100 mph."

\*The well-known K-4 Class of the Pennsylvania Railroad.



**FRANKLIN RAILWAY SUPPLY  
COMPANY, INC.**

**NEW YORK**

**CHICAGO**

**In Canada: FRANKLIN RAILWAY SUPPLY COMPANY, LIMITED, MONTREAL**

summary of returns through February 14 from cards mailed to 50,000 bondholders by the Missouri Pacific showed that the bondholders generally favor rejection of the so-called "Stedman Plan" of reorganization. On the principal underlying bond issues the post card poll varied from 94.94 per cent up to 97.33 per cent against the plan. February 17 was the final day for the bondholders to vote the plan.

**NORTHWESTERN PACIFIC.**—*Abandonment.*—This road has applied to the Interstate Commerce Commission for authority to abandon a section of its Sonoma branch extending from Sonoma, Calif., to Glen Ellen, 6.6 miles.

**PENNSYLVANIA.**—*Abandonment by the Western Allegheny.*—The Western Allegheny has asked the Interstate Commerce Commission for authority to abandon that portion of its line extending from a connection with the Bessemer & Lake Erie at Queen Junction, Pa., to a connection with the Baltimore & Ohio at West Pittsburgh, 26.5 miles.

**PIOCHE PACIFIC.**—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon a line extending from Pioche, Nev., to the Union Pacific terminal, three miles.

**PORT SAN LUIS TRANSPORTATION.**—*Purchase, Operation, and Stock.*—This recently-organized company has been authorized by Division 4 of the Interstate Commerce Commission to purchase and operate the properties of the Pacific Coast, a narrow-gauge line extending from San Luis Obispo, Calif., to Port San Luis, 12 miles. At the same time the new company was given permission to issue \$30,000 of common capital stock of a par value of \$100 a share, the proceeds to be used to purchase and rehabilitate the Pacific Coast, and to provide for working capital.

**READING.**—*Bond Redemption.*—This road is advising holders of Philadelphia & Reading extended mortgage 4½ per cent bonds of 1868, due October 1, 1943, that it is electing to exercise its right to redeem on April 1, 1942, the entire \$2,643,000 principal amount of these bonds now outstanding at 100 per cent and accrued interest.

**RIO GRANDE SOUTHERN.**—*RFC Loan.*—Acting on this company's request, Division 4 of the Interstate Commerce Commission has dismissed its application in Finance Docket No. 13599 for authority to borrow \$50,000 from the Reconstruction Finance Corporation.

**ST. LOUIS-SAN FRANCISCO.**—*Must Pay Interest.*—Trustees of the St. Louis-San Francisco have been ordered by the federal district court at St. Louis to pay semi-annual interest due on the Kansas City, Memphis & Birmingham general mortgage 4 per cent and 5 per cent income bonds. The interest payments will amount to \$20 per \$1,000 bond on the general mortgage issue and \$25 per \$1,000 bond on the income obligations.

**SOUTHERN.**—*Abandonment.*—Acting on this company's request, Division 4 of the

Interstate Commerce Commission has dismissed without prejudice its request for authority in Finance Docket No. 13587 to abandon a branch line extending from Statesville, N. C., to Taylorsville.

**SOUTHERN PACIFIC.**—*Acquisition of the Waco, Beaumont, Trinity & Sabine.*—The Southern Pacific would not be required to acquire the lines of the Waco, Beaumont, Trinity & Sabine if Division 4 of the Interstate Commerce Commission adopts a recommended order of its Examiner W. J. Schutrumpf. When the Southern Pacific was authorized to acquire control of the St. Louis Southwestern in 1932, the commission imposed the condition that the S. P. would also acquire the Waco line if the commission found such an action to be in the public interest. Recently the Waco has asked the commission to make such a finding, but Examiner Schutrumpf feels that an order would not be in the public interest and recommends against it.

**SOUTHERN PACIFIC.**—*Assumption of Liability by Texas & New Orleans.*—The Texas & New Orleans has filed with the Interstate Commerce Commission a supplemental application in Finance Docket No. 9689, Southern Pacific (Texas and Louisiana Lines) Consolidation, asking for an order authorizing it to assume obligation by executing and delivering instruments of assumption and agreements to pay matured bonds of certain S. P. constituent companies. The now-matured obligations, which were assumed by the T. & N. O. in the consolidation proceeding, are \$4,728,000 of the Galveston, Harrisburg & San Antonio's eastern division first mortgage bonds, \$1,000,000 of the division's second mortgage bonds, and \$10,000,000 of the same company's Galveston-Victoria division bonds; also, \$450,000 of the Houston & Texas Central's Lampass Extension first mortgage bonds. The first three issues and \$1,000,000 of the Galveston-Victoria division bonds are pledged with the United States Trust Company to secure the S. P. guaranty of the Central Pacific's European Loan debentures; and \$9,000,000 of the Galveston-Victoria division bonds are pledged with the Guaranty Trust Company to secure the S. P.'s 10-year 3¾ per cent secured bonds. The application states that it is acceptable to the parties to continue to hold the pledged bonds, provided they continue to be legal obligations of the T. & N. O., payable upon presentation with liens unimpaired. To accomplish this it is necessary under Texas law for the applicant to execute, acknowledge and record the assumptions of obligation and agreements to pay.

#### Average Prices of Stocks and Bonds

	Feb. 17	Last week	Last year
Average price of 20 representative railway stocks..	28.32	28.69	28.61
Average price of 20 representative railway bonds..	65.68	65.88	61.81

#### Dividends Declared

Pittsburgh, Youngstown & Ashtabula.—7 Per Cent Preferred, \$1.75, quarterly, payable March 2 to holders of record February 20.  
 Virginian.—6½¢, quarterly, payable March 27 to holders of record March 17.

## Railway Officers

### EXECUTIVES

**C. E. Walsh**, general purchasing agent of the Pennsylvania, with headquarters at Philadelphia, Pa., has been promoted to assistant to the vice-president in charge of real estate, purchases and insurance.

**Philip A. Hollar**, whose appointment as assistant to Vice-President C. H. Buford of the Association of American Railroads at Washington, D. C., was reported in the *Railway Age* of February 7, page 350, was born at Altoona, Pa., on August 9, 1903. Mr. Hollar was graduated from Purdue University with a B. S. degree in mechanical engineering in 1925. He entered railroad service in 1919 as messenger-clerk with the Pennsylvania, serving during summer months in various capacities until 1923, when he became special apprentice.



Philip A. Hollar

In 1927 he was appointed motive power inspector at the Altoona works and in 1929 he became coal agent. Mr. Hollar was appointed fuel purchasing agent of the Pennsylvania in 1934, becoming assistant stores manager in January, 1941, which position he held until his recent appointment.

**Paul A. Walsh**, assistant general freight agent on the Northern Pacific, has been promoted to assistant to the vice-president-traffic, with headquarters as before at St. Paul, Minn., succeeding **John P. Dennis**, who has been appointed assistant traffic manager of the Texas Company, with headquarters at New York. Mr. Dennis was born on November 18, 1898, at Preston, Md., and attended Princeton University. He entered railroad service on January 1, 1921, as statistical clerk for the Northern Pacific. On July 1, 1922, he became traveling freight agent and on February 1, 1925, he became chief clerk to assistant general freight agent. On September 1, 1925, Mr. Dennis was appointed chief clerk to assistant freight traffic manager and on May 1, 1927, he became assistant to freight traffic manager. From January 1, 1932, to October



16, 1937, he served as assistant general freight agent, becoming assistant to general traffic manager on the latter date. Mr. Dennis was appointed assistant to vice-president—traffic, on April 13, 1938.

**J. F. Dalton**, whose appointment as vice-president—traffic of the Norfolk Southern at Norfolk, Va., was reported in the *Railway Age* of January 31, was born on



**J. F. Dalton**

April 23, 1890, at Norfolk. Mr. Dalton attended private and public schools and entered railroad service with the Southern, subsequently going with the Seaboard Air Line. Mr. Dalton entered the service of the Norfolk Southern in 1909 as chief rate clerk in the traffic department. He became assistant general freight agent in 1914, general freight agent in 1916 and general freight and passenger agent in 1917. He was furloughed in 1918 for service with the United States Army. Mr. Dalton became traffic manager of the Norfolk Southern in 1929 and chief traffic officer in 1936, which position he held until his recent appointment as vice-president—traffic.

**Fred H. Hooper**, whose promotion to assistant to the president of the Kansas City Southern-Louisiana & Arkansas Lines,



**Fred H. Hooper**

with headquarters at Kansas City, Mo., was reported in the *Railway Age* of February 7, was born at Walnut, Kan., on November 15, 1885, and became a messenger for the Western Union Telegraph Company at Pittsburg, Kan., in 1901. In January, 1902,

he became a telegraph operator for the K. C. S., later serving as an operator on the St. Louis-San Francisco, the Chicago, Burlington & Quincy and the Atchison, Topeka & Santa Fe, and then returning to the K. C. S. in October, 1905. In May, 1906, he was promoted to train dispatcher and in April, 1918, he was advanced to chief dispatcher. Mr. Hooper was promoted to trainmaster in September, 1920, and in February, 1922, he was appointed assistant to the general superintendent of transportation. In January, 1925, he was promoted to superintendent of car service, with headquarters at Kansas City, and in March, 1932, he was appointed trainmaster at Pittsburg, Kan. In July, 1936, he was appointed assistant to the general superintendent of transportation and in June, 1937, he was promoted to division superintendent, with headquarters at Shreveport, La. His appointment as assistant to the president was effective January 28.

**Arthur N. Reece**, whose promotion to assistant to the president of the Kansas City Southern-Louisiana & Arkansas Lines, with headquarters at Kansas City, Mo., was reported in the *Railway Age* of February 7, entered railroad service in June, 1903, as a chainman on the Atchison,



**Arthur N. Reece**

Topeka & Santa Fe, after having studied civil engineering at the University of Kansas for three years, later being advanced to rodman, draftsman and instrumentman. In April, 1905, he went with the St. Louis-San Francisco as an instrumentman, later serving successively as inspector on building construction, assistant engineer and chief clerk to the general superintendent. Mr. Reece went with the Kansas City Southern in March, 1911, as an assistant engineer and in November, 1912, resigned to become chief engineer of the Hanna & Hickey Construction Co., Ft. Worth, Tex. He returned to the K. C. S. a year later as office engineer, with headquarters at Kansas City, and was later promoted to division engineer, with headquarters at Texarkana, Tex. In January, 1922, Mr. Reece was advanced to chief engineer, with headquarters at Kansas City, and in October, 1940, he was appointed chief engineer in charge of engineering, new construction and standards of the K. C. S.-L. & A. system, which

position he held until his recent promotion, effective January 28.

**Horace E. Newcomet**, vice-president of the Western region of the Pennsylvania, with headquarters at Chicago, has been promoted to the position of vice-president—Chicago, and **James M. Symes**, general manager of the Western region, has been promoted to vice-president of that region,



**Horace E. Newcomet**

with headquarters as before at Chicago, succeeding Mr. Newcomet.

Mr. Newcomet was born at Philadelphia, Pa., on April 27, 1874, and graduated from the University of Pennsylvania. He entered railway service on the Pennsylvania on February 18, 1896, as assistant on the engineering corps of the Chicago division and from 1898 to 1901 he served successively as acting assistant engineer on the Cleveland & Pittsburgh division and assistant engineer maintenance of way on the Cincinnati division. For the following 12 years he was engineer maintenance of way successively of the Indianapolis & Vincennes; the Cincinnati, the Erie & Ashtabula and the Pittsburgh divisions. He was then promoted to superintendent of the Louisville division in January, 1913, and



**James M. Symes**

was transferred to the Logansport division in March, 1918, and to the Cleveland & Pittsburgh division in March, 1920. Three years later he was promoted to general superintendent of the Lake division, with headquarters at Cleveland, Ohio, then be-

*Continued on second left-hand page*

# MORE LIMA 4-8-4's FOR C and O



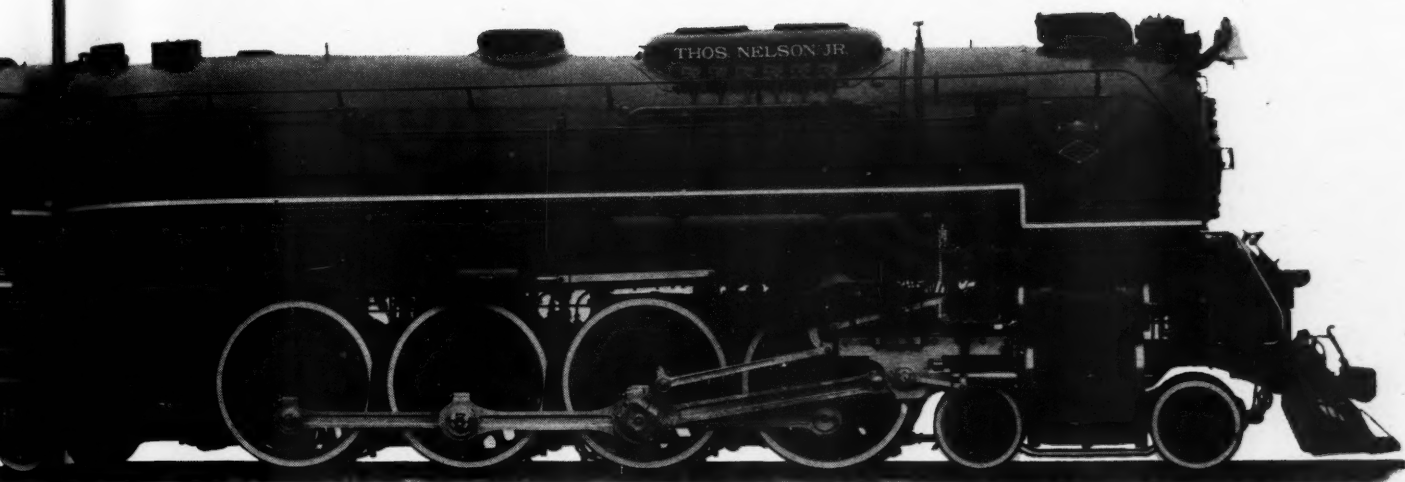
CHESAPEAKE AND OHIO				
WEIGHT IN WORKING ORDER POUNDS				
On Drivers	Engine Truck	Trailer Truck	Total Engine	Tender $\frac{2}{3}$ Capacity Loaded
290,000	92,000	121,500	503,500	309,700
WHEEL BASE			TRACTION POWER	
Driving	Engine	Engine & Tender	Main Cylinders	With Booster
19'-3"	46'-10½"	98'-5¼"	68,300	82,655
BOILER		CYLINDERS		
Diameter 91 11/16" O.D. Front	Pressure 255	Diameter 27½"	Stroke 30"	Driving Wheel Dia. 72"



## LIMA LOCOMOTIVE WORKS



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It takes real power—  
steam power—to suc-  
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heavy passenger trains  
of the Chesapeake and

Ohio over the mountainous route served  
by the George Washington, the Sportsman  
and the F. F. V.

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provide the ease that permits "Sleep Like  
a Kitten" the Railroad is using loco-  
motives of the type pictured above in  
this service.



## INCORPORATED, LIMA, OHIO

ing further promoted to general manager of the Western region, with headquarters at Chicago on September 16, 1926. On June 16, 1929, he was advanced to vice-president of the Western region.

Mr. Symes was born at Glen Osborne, Pa., near Pittsburgh, on July 8, 1895, and attended the Carnegie Institute of Technology. He began work with the Pennsylvania on May 1, 1916, in the office of the auditor of through freight traffic at Pittsburgh, transferring to the trainmaster's office of the Pittsburgh division later the same year. After serving in various capacities, he was transferred to the general superintendent's office at Cleveland, Ohio, in May, 1920, and returned to Pittsburgh three years later as freight movement director in the office of the superintendent of freight transportation. Mr. Symes became chief clerk to the general manager at Chicago on May 1, 1927, and one year later was promoted to superintendent of passenger transportation of the Western region, with headquarters at Chicago. On December 1, 1929, he was transferred to the Eastern region, with headquarters at Philadelphia, Pa., and on September 16, 1934, he was promoted to chief of freight transportation of the system. Mr. Symes was granted a leave of absence on October 1, 1935, to become vice-president in charge of operations and maintenance of the Association of American Railroads at Washington, D. C., and on February 1, 1939, he returned to the Pennsylvania as general manager of the Western region, with headquarters at Chicago.

**Walter W. Patchell**, general superintendent of the Eastern Pennsylvania division of the Pennsylvania, with headquarters at Harrisburg, Pa., has been promoted to assistant to operating vice-president, with headquarters at Philadelphia, Pa. Mr. Patchell was born on November 28, 1897, at Philadelphia and received his



Walter W. Patchell

B.S. degree in civil engineering from Pennsylvania State College in 1919. He entered railroad service on July 7, 1915, as tracer on the Philadelphia Terminal division of the Pennsylvania, serving during summer months while attending college as draftsman on that division. After graduation from college Mr. Patchell became assistant to division engineer on the

Conemaugh division of the Pennsylvania on July 14, 1920, then serving successively as acting assistant supervisor on the Monongahela division, assistant supervisor on the Pittsburgh division and supervisor on the Monongahela and Panhandle divisions. On January 1, 1929, he was appointed division engineer of the Cumberland Valley (P. R. R.), and he became division engineer of the Fort Wayne division on December 16, 1929, being transferred to the Philadelphia Terminal division on July 1, 1933. He was appointed superintendent of passenger transportation of the Central region at Pittsburgh on September 16, 1933, and from November 16, 1934, to October 1, 1935, he was assigned to special duties in the office of the vice-president at Philadelphia, then being assigned to similar duties with the chief electrical engineer. On November 1, 1935, Mr. Patchell became superintendent of the Indianapolis division, being transferred to the St. Louis division at Terre Haute, Ind., on September 16, 1936, and to the Baltimore division on November 1, 1936. From January 16, 1938, to April 16, 1939, he was assigned to special duty with the chief electrical engineer at Philadelphia and on the latter date he was appointed general superintendent of the Lake division at Cleveland, Ohio. He was transferred to the Eastern Pennsylvania division at Harrisburg in February, 1941.

## OPERATING

**Frederick W. Okie**, superintendent of the Birmingham division of the Southern, with headquarters at Birmingham, Ala., has been commissioned a lieutenant-colonel, U. S. Army Engineers, and has been granted a leave of absence.

**H. H. Pevler**, superintendent of the Philadelphia Terminal division of the Pennsylvania, with headquarters at Philadelphia, Pa., has been promoted to general superintendent of the Eastern Pennsylvania division at Harrisburg, Pa. A photograph of Mr. Pevler and a biographical sketch of his railway career were published in the *Railway Age* of January 24. **E. C. Gegenheimer**, superintendent of the Middle division at Altoona, Pa., has been transferred to the Philadelphia Terminal division. **H. G. Hostetter**, superintendent of the Delmarva division at Cape Charles, Va., has been transferred to the Middle division. **P. W. Triplett**, division engineer of the New York zone at Jamaica, Long Island, New York, has been promoted to superintendent of the Delmarva division. **J. D. Berry, Jr.**, has been appointed assistant superintendent stations and transfers of the New York zone.

**Lawrence E. Thornton**, whose promotion to superintendent of the Baltimore & Ohio Chicago Terminal and the Chicago terminal of the Alton, with headquarters at Chicago, was reported in the *Railway Age* of January 31, was born at Browning, Ill., on August 7, 1900, and attended Miami University in 1920 and 1922. He entered railway service on the Chicago, Burlington & Quincy in September, 1923, and two years later, went with the Alton as an assistant engineer at Springfield, Ill. In

January, 1930, he was promoted to assistant engineer in the chief engineer's office at Chicago and on January 1, 1932, he was appointed assistant division engineer of the Eastern division, with headquarters at Bloomington, Ill. On July 1, 1939, Mr.



Lawrence E. Thornton

Thornton was appointed assistant trainmaster at Bloomington and on August 16, 1940, he was advanced to trainmaster, with the same headquarters, which position he held until his recent promotion, effective January 1.

**Donald Y. Geddes**, superintendent of the New York division of the Pennsylvania with headquarters at Jersey City, N. J., has been promoted to assistant to the general manager of the New York zone, with headquarters at New York. **J. Benton Jones**, superintendent of the Cleveland division, has been transferred to the New York division at Jersey City, to succeed Mr. Geddes. **F. H. Krick**, who has been on leave of absence, has been appointed superintendent of the Cleveland division.

Mr. Geddes was born in Chandlersville,



Donald Y. Geddes

Ohio, on August 24, 1885, and was graduated from Ohio State University in 1907 with a civil engineering degree. During the summer vacation periods of 1903 and 1904, he was employed as rodman and instrumentman on the Ohio River & Western (now Pennsylvania), and during the summers of 1905 and 1906, he worked in the office of the chief engineer at Zanes-

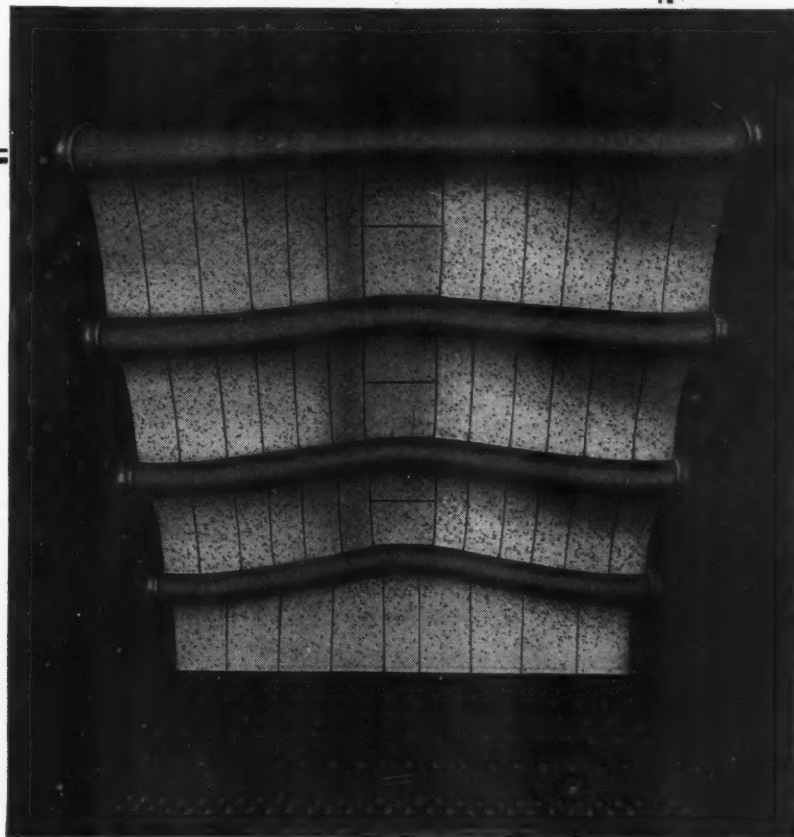
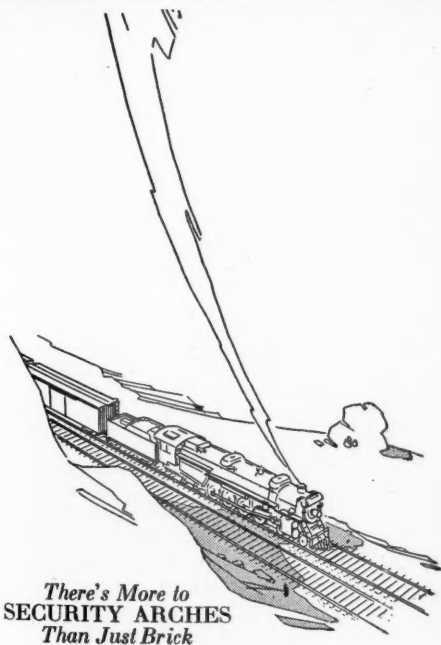


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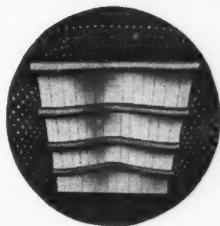
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ville, Ohio. In June, 1912, Mr. Geddes was appointed assistant to the general manager and in July, 1912, became superintendent. In October, 1918, he was transferred to Peoria, Ill. as superintendent of the Pittsburgh, Cincinnati, Chicago & St. Louis (now Pennsylvania), becoming superintendent of the South Bend division of the same road in March, 1920. Mr. Geddes became superintendent of the New York division of the Pennsylvania at Jersey City on July 1, 1928.

**Harry L. Nancarrow**, general superintendent of the Lake division of the Pennsylvania, with headquarters at Cleveland, Ohio, has been promoted to general manager of the Western region, with headquarters at Chicago, succeeding **James M. Symes**, whose promotion to vice-president of the Western region is reported elsewhere in these columns. **Paul E. Feucht**, general superintendent of the Southwestern division, with headquarters at Indianapolis, Ind., has been transferred to the Lake division, relieving Mr. Nancarrow, and **Walter O. Teufel**, superintendent of the St. Louis division, with headquarters at Terre Haute, Ind., has been promoted to general superintendent of the South-



**Harry L. Nancarrow**

western division, replacing Mr. Feucht. **James P. Newell, Jr.**, superintendent of the Logansport division, with headquarters at Logansport, Ind., has been transferred to the St. Louis division, succeeding Mr. Teufel, and **H. M. Wood**, master mechanic of the Pittsburgh, Conemaugh and Monongahela divisions, has been advanced to superintendent of the Logansport division, relieving Mr. Newell.

Mr. Nancarrow was born at Jersey Shore, Pa., on January 13, 1897, and graduated in mechanical engineering from Bucknell University in 1920. He entered railroad service on October 7, 1920, as draftsman in the office of the superintendent of motive power of the Pennsylvania at Philadelphia, Pa. On March 21, 1921, Mr. Nancarrow was appointed special apprentice at the Altoona machine shops, becoming inspector of motive power there on April 17, 1924. He was appointed gang foreman on the Cleveland division on September 1, 1924, and became assistant enginehouse foreman on February 10, 1926. On March 1, 1927, he became assistant master mechanic on the Akron division,

being promoted to master mechanic of the Erie & Ashtabula division on May 16, 1928. On January 1, 1929, he was transferred to the Baltimore division and then to the Philadelphia Terminal division. On September 16, 1936, he became superintendent of the Logansport division, being



**Walter O. Teufel**

transferred to the Buffalo division on January 16, 1938. He became superintendent of passenger transportation of the Eastern Region at Philadelphia, on May 1, 1939, and was appointed superintendent of the Pittsburgh division at Pittsburgh, Pa., on January 16, 1940. Mr. Nancarrow was advanced to general superintendent of the Lake division on February 1, 1941.

Mr. Teufel was born at Milton, Pa., on July 30, 1897, and attended Pennsylvania State College. He entered railway service on April 10, 1916, as an apprentice in the mechanical department of the Pennsylvania. On October 1, 1922, he was appointed motive power inspector and on February 15, 1926, he was promoted to assistant master mechanic at Wilmington, Del. Mr. Teufel was transferred to Altoona, Pa., on March 1, 1930, and on Jan-



**H. M. Wood**

uary 1, 1931, he was promoted to master mechanic at New Castle, Pa. On May 1, 1932, he was appointed assistant master mechanic at New York and on November 1, 1933, he was advanced to master mechanic at Buffalo, N. Y. Mr. Teufel was later transferred to Pittsburgh, Pa., and Columbus, Ohio, and in July, 1939, he was

advanced to superintendent of the Indianapolis division, with headquarters at Indianapolis, Ind. In November, 1940, he was transferred to the St. Louis division, with headquarters at Terre Haute, which position he held until his recent promotion, effective February 16.

Mr. Wood was born in Altoona, Pa., on June 4, 1901, and was educated at Pennsylvania State College. He entered railway service as a clerk in the Altoona machine shop of the Pennsylvania on July 7, 1919. He became a machinist apprentice on June 15, 1922, was made special apprentice in 1925, and was appointed motive power inspector in 1927. In 1930 he went to Harrisburg, Pa., as a gang foreman and five years later became assistant foreman at Enola yard, Harrisburg. He was advanced to assistant master mechanic on the Pittsburgh division in 1936, and was promoted to master mechanic of the Long Island Railroad on August 1, 1937. He returned to the Pittsburgh division of the Pennsylvania as acting master mechanic on May 16, 1941, and on December 1, 1941, was appointed master mechanic of the Western Pennsylvania general division, consisting of the Pittsburgh, Conemaugh and Monongahela divisions, which position he held until his recent promotion.

**D. H. Miller**, trainmaster on the Illinois Central at Herrin, Ill., has been promoted to assistant superintendent of the St. Louis division, with the same headquarters, a newly created position, and **Roy Cavaness**, assistant trainmaster at Benton, Ill., has been advanced to trainmaster at Herrin, succeeding Mr. Miller. **Harry E. Benham**, yardmaster at Dubuque, Iowa, has been promoted to trainmaster at Bluford, Ill., relieving **William H. Street**, who has been granted a leave of absence because of illness.

## FINANCIAL, LEGAL AND ACCOUNTING

**Miss Vila M. Graves**, secretary to the secretary of the Chicago, Milwaukee, St. Paul & Pacific, has been promoted to assistant secretary, with headquarters as before at Chicago, succeeding **Mrs. Ina C. Trewin**, whose death on January 2 was reported in the *Railway Age* of January 10.

**William E. Murphy**, auditor of revenues of the Reading at Philadelphia, Pa., whose retirement on January 31 was reported in the *Railway Age* of February 7, entered the service of the Reading on November 22, 1889, as an extra lamp lighter and subsequently served as agent at various points. In May, 1904, he was appointed traveling station auditor and in October, 1912, he became chief clerk to the auditor of traffic receipts. In February, 1916, Mr. Murphy was appointed auditor of passenger traffic and on November 1, 1920, he became auditor freight traffic, which position was merged on January 1, 1937, with that of auditor of passenger traffic and the title changed to auditor of revenues. For several years Mr. Murphy was chairman of the Freight Accounting committee of the Railway Accounting





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Officers Association, later merged with the Association of American Railroads.

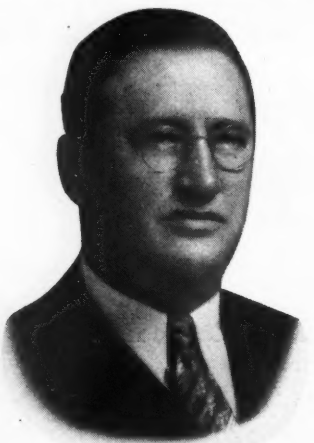
**John G. Wormick**, whose appointment as auditor of revenues of the Reading at Philadelphia, Pa., was reported in the *Railway Age* of February 7, was born on February 22, 1886. He received his educa-



**John G. Wormick**

tion in the public schools of Philadelphia and Temple University and entered the service of the Reading in 1898, serving successively as messenger, timekeeper, bookkeeper and accountant in the division offices. In 1920 he was transferred to the office of auditor of disbursements as traveling disbursements auditor and in 1927 he was appointed assistant auditor of disbursements, in which capacity he remained until his recent appointment as auditor of revenues.

**Edward N. Larson**, whose promotion to auditor of the Missouri-Kansas-Texas of Texas, with headquarters at Dallas, Tex., was reported in the *Railway Age* of February 14, was born at Valley, Neb., on March 2, 1882, and entered railway service in March, 1898, with the Chicago,



**Edward N. Larson**

Burlington & Quincy, serving in various positions in the accounting and treasury departments at Omaha and advancing to chief clerk to the general auditor. He resigned on February 1, 1913, when the Omaha and Chicago offices of the Burlington were consolidated and on December 8, 1913, he went with the Katy as chief clerk in the voucher and bill bureau at St. Louis,

Mo. Mr. Larson was advanced to special examiner in the auditing department in December, 1914, and subsequently was promoted to chief clerk to the auditor. In September, 1918, he was appointed auditor of revenue and two years later he was transferred to the M-K-T of Texas at Dallas. On April 1, 1932, he was transferred back to St. Louis, where he remained until his recent promotion, effective February 1.

**Robert S. Gawthrop**, whose promotion to general solicitor of the Pennsylvania at Philadelphia, Pa., was reported in the *Railway Age* of February 14, was born in Chester county, Pa., on October 20, 1878, and was graduated from the University of Pennsylvania with an A. B. degree in 1901. On October 11, 1904, Mr. Gawthrop was admitted to the Chester county bar. He was district attorney of that county from 1909 to 1911. In May, 1915, he was appointed judge of the Court of Common Pleas, Chester county, and in January, 1916, he resumed the practice of law. From 1919 to 1922 Mr. Gawthrop was first deputy attorney general of Pennsylvania and from 1922



**Robert S. Gawthrop**

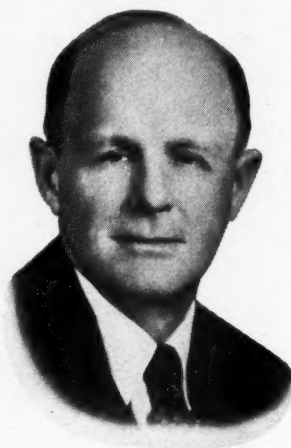
to 1932, he served on the Superior Court bench of Pennsylvania. In January, 1933, he resumed private practice in Harrisburg as a member of the firm of Hause, Gawthrop, Evans and Storey. In 1935 he was retained as district solicitor of the P. R. R. for Chester county and in August, 1936, he became general attorney for the Pennsylvania at Philadelphia, which position he held until his recent promotion.

#### ENGINEERING & SIGNALING

**Kenneth J. Silvey**, track supervisor of the New York division of the Pennsylvania, has been appointed engineer of the Monongahela division at Pittsburgh, Pa.

**Eugene F. Salisbury**, whose promotion to chief engineer of the Kansas City Southern-Louisiana & Arkansas Lines, with headquarters at Kansas City, Mo., and Shreveport, La., was reported in the *Railway Age* of February 14, was born at Omaha, Neb., on June 5, 1886, and graduated in engineering from Missouri University in 1908. He entered railway service in 1909 as an assistant engineer on the

Missouri Pacific and in August, 1919, he went with the St. Louis Southwestern of Texas and the Louisiana & Arkansas as acting principal assistant engineer of both roads, with headquarters at Tyler, Tex. In March, 1920, Mr. Salisbury was appointed chief engineer of the Louisiana & Arkansas, with headquarters at Minden,



**Eugene F. Salisbury**

La., later being transferred to Shreveport, and in October, 1940, he was appointed chief engineer of maintenance of way and structures of the K. C. S.-L. & A. system, which position he held until his recent appointment, effective January 28. Mr. Salisbury is the author of "Influence of Diversions on the Mississippi and Atchafalaya Rivers", published in the November, 1935, A. S. C. E. proceedings.

#### TRAFFIC

**A. M. Lawhon, Jr.**, has been appointed district freight and passenger agent of the Southern, with headquarters at Selma, Ala., succeeding **T. L. Dyer**, deceased.

**A. F. Lee**, ticket agent for the Great Northern at Portland, Ore., has been appointed general agent, consolidated ticket office, at that point, a change of title.

Effective February 16, the Freight and Passenger departments of the Denver & Rio Grande Western, Room 220 at 500 Fifth avenue, New York, were consolidated under the jurisdiction of **V. A. Farrell** as general agent for both departments. **G. L. Kenny**, heretofore general agent freight department, has been appointed commercial agent reporting to Mr. Farrell.

**T. C. Deane** has been appointed general freight agent of the Sabine & Neches Valley, with headquarters at Deweyville, Tex.

**W. P. Cox**, general agent, freight department, for the Missouri-Kansas-Texas at Chicago, has been promoted to assistant general freight agent, with the same headquarters, a change of title.

**L. A. Fonger**, assistant general freight agent on the Canadian National at Winnipeg, Man., has been promoted to general freight agent, with the same headquarters and **R. M. McBain**, division freight agent at Calgary, Alta., has been advanced to as-



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Excerpt from an Address at the  
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THE many advantages of this emergency procedure from a production standpoint are obvious—More locomotives of proven design can be delivered in shortest possible time.

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sistant general freight agent at Winnipeg, succeeding Mr. Fonger. **R. B. McIntosh** has been appointed division freight agent at Calgary replacing Mr. McBain.

**Lawrence N. Helm**, foreign freight agent for the Norfolk & Western at Cincinnati, Ohio, has been granted a leave of absence to serve as traffic agent, office of Quartermaster General, U. S. Army, Norfolk, Va.

**J. P. McDonough**, foreign freight agent of the Gulf, Mobile & Ohio, has been promoted to freight traffic manager, with headquarters as before at Mobile, Ala. **R. P. Tallman**, executive general agent at Jackson, Miss., has been appointed freight traffic manager, with the same headquarters.

**Ed W. Lambert**, traveling freight agent for the Pere Marquette at St. Louis, Mo., has been promoted to general agent at Memphis, Tenn., effective February 16. **Mark R. Coleman**, general agent for the Pere Marquette and the Chesapeake & Ohio at Memphis, continues as general agent for the C. & O., at that point.

**E. A. Montgomery**, assistant general agent for the Kansas City Southern-Louisiana & Arkansas Lines at New Orleans, La., has been promoted to division freight agent at that point. **L. J. Rosentreter**, commercial agent at New Orleans, has been advanced to general agent at that point.

**E. G. Anderson**, chief clerk in the freight traffic department of the Northern Pacific at St. Paul, Minn., has been promoted to assistant general freight agent, with the same headquarters, succeeding **Paul A. Walsh**, whose promotion to assistant to the vice-president—traffic, is reported elsewhere in these columns.

### PURCHASES AND STORES

**E. J. Lamneck**, purchasing agent of the Pennsylvania, has been promoted to general purchasing agent, with headquarters at Philadelphia, Pa., succeeding **C. E.**



E. J. Lamneck

**Walsh**, whose promotion to assistant to the vice-president in charge of real estate, purchases and insurance is reported else-

where in these columns. **J. S. Fair, Jr.**, assistant stores manager, has been appointed acting purchasing agent.

**Mr. Lamneck** was born in Ohio on June 27, 1887, and entered railroad service in 1907 as a truck builder on the Pittsburgh, Cincinnati, Chicago & St. Louis (now P. R. R.) at Scully, Pa. He was appointed to a clerkship in 1910 and later transferred to the purchasing department. In 1921 he was advanced to assistant to the purchasing agent of the Central region and upon consolidation of the purchasing department forces in Philadelphia in 1924 he became assistant to the purchasing agent for the system. In 1929 he was appointed fuel purchasing agent and in 1934 he was promoted to purchasing agent.

### OBITUARY

**Benjamin DuPont**, a retired master mechanic of the Louisville & Nashville, died at New Orleans, La., on February 14.

**James C. Winfield**, assistant general freight agent on the St. Louis Southwestern at St. Louis, Mo., died in that city on January 22.

**H. G. Bock**, general agent for the Denver & Rio Grande Western at Omaha, Neb., died in a hospital at Council Bluffs, Iowa, on February 9.

**Burton Beck**, who retired on June 1, 1941, as general agent, passenger department, on the Union Pacific at Portland, Ore., died at his home in that city on February 8.

**William Sherlocke Bronson**, who retired in December, 1938, as vice-president and general counsel of the Pittsburgh & West Virginia at Washington, D. C., died at Richmond, Va., on February 11 after a brief illness, at the age of 77.

**George H. Schleyer**, at one time vice-president and general manager of the Southern district and the lines in Texas of the St. Louis-San Francisco and later executive general agent at Birmingham, Ala., who retired about 15 years ago, died at Los Angeles, Cal., on January 10.

**Gustave A. Laubenfels**, aged 82, district engineer of the former Iowa district of the Chicago, Burlington & Quincy, with headquarters at Burlington, Iowa, who retired on May 1, 1932, died at his home in that city on February 4, as the result of injuries suffered several days previously when he fell.

**W. H. Bissland**, who retired on February 1, 1934, as general baggage agent of the Missouri Pacific, with headquarters at St. Louis, Mo., died February 12 at San Antonio, Tex. Mr. Bissland was born at Gourrock, Scotland, on January 22, 1864, and entered railway service on June 2, 1885, as a clerk on the Atchison, Topeka & Santa Fe at Topeka, Kan. On March 15, 1890, he went with the Missouri Pacific as secretary to the general passenger agent at St. Louis and later served successively as chief clerk to the general passenger agent, assistant general ticket agent, assistant gen-

eral passenger agent and general baggage agent.

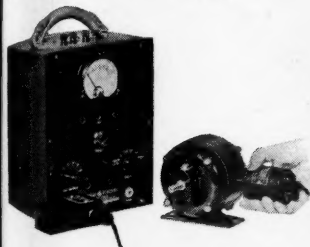
**Curtis E. Knickerbocker**, former chief engineer of the New York, Ontario & Western at Middletown, N. Y., died on February 15 at his home in New York after a week's illness, at the age of 74. Mr. Knickerbocker was born on November 17, 1867, at Morrisville, N. Y., and was graduated from Princeton University in 1891. He was engineer maintenance of way of the New York, Ontario & Western from 1903 to 1910 and during 1911 he served as chief engineer. From September, 1914, to May, 1918, he was with the Interstate Commerce Commission, and on the latter date he went with the United States Railroad Administration, becoming regional engineer, Eastern region, Division of Liquidation, U. S. R. A., at New York on March 1, 1920.

**Earle G. Evans**, superintendent of safety of the Louisville & Nashville, with headquarters at Louisville, Ky., whose death on February 8 was reported in the *Railway Age* of February 14, was born at Birmingham, Ala., on April 24, 1878, and entered railway service on November 20, 1894, as a messenger in the dispatcher's office of the L. & N. at Birmingham. He was then appointed successively operator, dispatcher, chief dispatcher, assistant trainmaster, rules examiner, assistant trainmaster, and trainmaster, all on the Birmingham division. On November 15, 1916, Mr. Evans was appointed assistant to the assistant superintendent and on August 1, 1917, he was advanced to assistant superintendent of the Birmingham division. On May 1, 1927, he was promoted to superintendent of safety, with headquarters at Louisville, which position he held until his death. Mr. Evans was a retired captain of the Alabama National Guard.

**Evert C. Blundell**, who retired on November 1, 1938, as assistant to the executive vice-president, in charge of track maintenance, of the Chicago, St. Paul, Minneapolis & Omaha, with headquarters at St. Paul, Minn., died on February 2 at Glendale, Cal. Mr. Blundell was born in Le Sueur County, Minn., on June 19, 1867, and entered railway service in 1880 with the Chicago & North Western at Highmore, S. D. He subsequently served from 1889 to 1896, the Sioux City & Northern (now part of the Great Northern) and the Pacific Shore Line (now part of the Chicago, Burlington & Quincy), and from 1896 to 1898, the Union Pacific. In 1898, he went with the Omaha, and later was promoted to roadmaster, serving in that capacity successively at Itasca, Wis., and Eau Claire. In 1912, he was advanced to assistant superintendent, with headquarters at Eau Claire, and in January, 1913, he was promoted to division superintendent, with headquarters at Omaha, Neb. Mr. Blundell was further advanced in May, 1933, to assistant to the vice-president and general manager, with supervision over all track maintenance matters, with headquarters at St. Paul. His title was later changed to assistant to the executive vice-president, which position he held until his retirement.

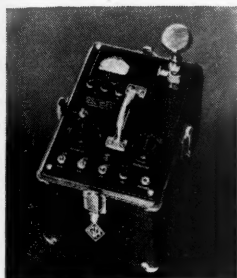


Among the many instruments needed for indicating, recording, and analyzing vibrations, movements, noises, and accelerations in aircraft, ships, equipment, and structures, the following are worthy of consideration:



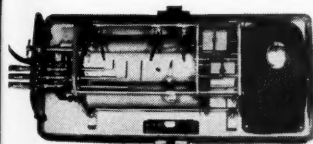
#### VIBRATION MEASURING EQUIPMENT

Velocity unit, Amplifier-vibration Meter, and Integrating unit for indicating velocities and displacements. In conjunction with recorders, oscillographs, and analyzers, records of amplitudes, velocities, frequencies, and accelerations are obtained.



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For the study of noises in engines, propellers, aircraft cabins, buildings, and equipment. Operates with a piezo-electric pick-up to measure vibrations. By amplifying and recording the output of the meter, permanent continuous records of noises and vibrations are obtained.



#### REDHED FLIGHT ANALYZER

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(Illustrations: General Electric Co.; General Radio Co.; Impact Register Co.)

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Other auxiliary testing equipment in this group: *Waugh Chronograph* for obtaining time-space curves up to 60 inches per second of chart speed. *Bernard Mechanical Oscillators*—apply periodic forces of known magnitudes and frequencies to structures. *Torque Testing Machine* accurately measures torques, in inch pounds, in bolts, shafts, crank shafts, and members of many shapes.



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Waugh Engineering Field Service for structural testing in field or laboratory is available with all types of instruments on a *per diem* or contract basis. Instruments may be purchased if desired; many of them may also be rented.

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